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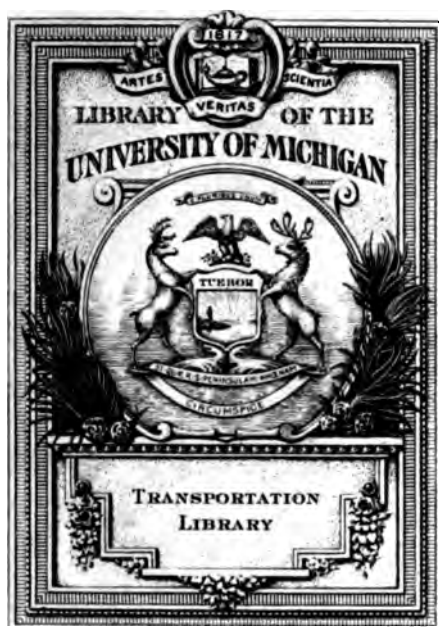
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P R E F A C E.

THE present Catalogue has been formed by abbreviation and amalgamation of the Catalogue printed in 1866, and the titles written for books acquired since that date. Considerable changes have been made in the methods of selecting the headings, and dates or conjectural dates have with a few exceptions been assigned to the books. The headings are selected according to the following plan :

I. *Non-official* publications appear under the authors' names ; failing such names, under those of the persons, places, etc., of which they treat ; failing that, under the heading ANONYMOUS. Journals and periodicals are arranged in alphabetical order under the heading PERIODICAL PUBLICATIONS. Works entered under the two last-named headings also appear under the names of their authors, when possible.

II. *Official* publications relating to particular persons, places, etc., appear under such names ; those of a general nature under the Governments or corporate bodies issuing them.

Official publications also appear in many cases under the names of their authors.

Owing to the doubtful orthography of Indian names, these are all grouped together under the heading INDIA, instead of appearing in their proper alphabetical order.

The larger non-personal headings, such as LONDON, EDINBURGH, have been sub-divided according to *subject*.

Societies appear under their respective names, when these are well known, but otherwise under the places where they meet :

e.g. ROYAL SOCIETY.

LIÈGE.—*Association des ingénieurs sortis de l'École de Liège.*

In order to make the Catalogue complete to the close of the year 1894, the titles of works acquired while it was in the press, as well as of those omitted from the general body of the work, have been included in the Addenda.

The Catalogue of the Horological Library, bequeathed to the Insti-

tution by the late B. L. Vulliamy, Assoc. Inst. C.E., forms an appendix.

The volumes now issued do not contain the index of subjects. This part of the Catalogue is in preparation, and will be issued separately at as early a date as possible. It has, however, been judged advisable that publication even in part should not be longer delayed, the more so as the arrangement now adopted for the first portion has resulted in its containing much of the information usually found in a subject-catalogue.

It only remains to add that it is proposed to take advantage of the increased room which will be afforded by the new library, when the rebuilding of the premises is completed, to rearrange the books, the scattered nature of the accommodation in the late building having gradually become the source of trouble and inconvenience. Much simplification will also result from numbering the cases and lettering the shelves, instead of the converse practice which existed in the old library, and in the course of time led to the compulsory use of three forms of each letter of the alphabet.

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OF

THE INSTITUTION OF CIVIL ENGINEERS.

H.

- HAACK, R., and BUSLEY, C. Die technische Entwicklung des Norddeutschen Lloyds und der Hamburg - Amerikanischen Packetfahrt-Aktiengesellschaft, etc. *Berlin*, 1893. 4to.
- HAARMANN, A. Das Eisenbahn-Geleise. Geschichtlicher Theil. 1 vol. in 2 pts. *Leipzig*, 1891. 8vo.
- HAAST, J. Report of a topographical and geological Exploration of the western districts of the Nelson province, New Zealand. *Tract*. 8vo. vol. 124. *Nelson*, 1861. 8vo.
- Report on the Formation of the Canterbury Plains, etc. *Christchurch*, 1864. folio.
- Report on the geological Exploration of the west coast of New Zealand. *Christchurch*, 1865. folio.
- Report on the geological formation of the Timaru District, in reference to obtaining a supply of Water. *Christchurch*, 1865. folio.
- Report on the Geological Survey of the province of Canterbury. *Christchurch*, 1864. folio.
- Report on the Headwaters of the River Rakaia. (Appendices.) *Christchurch*, 1866. folio.
- HABETS, A. Exposition Universelle de Vienne. Mines et métallurgie. Deuxième partie. Exploitation des mines. *Tract*. 8vo. vol. 253. *Liège*, 1875. 8vo.
- Extrait du rapport sur l'industrie des Sondages à l'Exposition Universelle de 1889, etc. *Tract*. 8vo. vol. 525. *Paris*, [1892.] 8vo.
- HACAULT, E. Der Eisenbahn-Hochbau. In einer Sammlung ausgeführter Bahnhöfe und anderer dazu gehöriger Baulichkeiten. *Berlin*, 1862. folio.

- HACHETTE, J. N. P. *Traité élémentaire des machines.*
Paris, 1811. 4to.
- HACKWORTH, T. Jubilee of the world's first public railway . . .
With a memoir of T. Hackworth. 1892. See ANONYMOUS.
- HADCOCK, A. G. *Artillery, etc.* 1893. See LLOYD, E. W., and
HADCOCK, A. G.
- HADDAN, J. C. List of Patents granted for England, 1844-46.
See PRINCE, A., and HADDAN, J. C.
- HADDAN, J. L. *Economical One-rail Railway for India, the
Colonies, and sparsely-populated countries.* Lond. 1871. 8vo.
- *La largeur de voie convenable pour les chemins de fer de la
Turquie.* Tract. 8vo. vol. 227. Constantinople, 1873. 8vo.
- *London Cabs. The "course" system, etc.* Tract. folio. vol. 29.
Lond. [1878?] folio.
- *Le pionnier chemin de fer abyssinien.* Tract. folio. vol. 25.
Constantinople, 1873. folio.
- *The Pioneer or steam Caravan. A collection of various lectures,
etc.* Lond. 1878. 8vo.
- *The Suez Canal Question viewed in a Cobdenian sense, etc.*
Tract. 8vo. vol. 261. Constantinople, 1873. 8vo.
- HADDON, J. *Commercial Bookkeeping and Phraseology in four
languages.* Lond. 1879. 8vo.
- HADFIELD, R. A. *Alloys of Iron and Chromium, etc.*
[Lond. 1892.] 8vo.
(From the Journal of the Iron and Steel Institute.)
- *Aluminium-steel.* Tract. 8vo. vol. 495. [Lond.] 1890. 8vo.
- *Hadfield's Patent Manganese Steel, etc.* Tract. folio. vol. 42.
[Lond.] 1884. folio.
- *Iron Alloys: with special reference to Manganese Steel.* Tract.
8vo. vol. 530. [Philadelphia? 1893.] 8vo.
- HADLEY, A. T. *Railroad Transportation, its history and its laws.*
New York, 1885. 8vo.
- HADLEY, J. *Biographical account of John Hadley, the inventor of
the quadrant, and of his brothers George and Henry.* Tract. 8vo.
vol. 192. Lond. [1840?] 8vo.
- *History of Hadley's Quadrant.* [By N. R. D.] Tract. 8vo. vol.
192. [1840?] 8vo.
- HAEDER, H. *A handbook on the Steam Engine . . . English
edition . . . with additions and alterations by H. H. P. Powles.*
Lond. 1893. 8vo.
- HAFERKORN, H. E., and HEISE, P. *Handy Lists of Technical
Literature. III., Engineering and Mechanics.*
Milwaukee, 1890. 8vo.
- HAGEAU, A. *Description du canal de jonction de la Meuse au
Rhin. (Atlas of plates.)* Paris, 1819. 4to. and folio.

- HAGEMANN, G. A. Nogle Varmetransmissions-Forsøg. *Tract.*
4to. vol. 99. *Kjøbenhavn*, 1883. 4to.
- HAGEN, E. Die elektrische Beleuchtung. *Berlin*, 1885. 8vo.
- HAGEN, G. Beschreibung der französischen Häfen am Mittelländischen Meere und am Canale. *Berlin*, 1858. 4to.
- Entachtliche Aeusserung über die Hafen-Anlage auf dem Grasbrook. *Berlin*, 1858. folio.
- Grundzüge der Wahrscheinlichkeitsrechnung. *Tract.* 8vo. vol. 245. *Berlin*, 1867. 8vo.
- Handbuch der Wasserbaukunst. (Atlas of Plates.) 7 vols. *Königsberg*, 1853–63. 8vo. and folio.
- — Dritte Auflage. 10 Bde. (Atlas of Plates.) *Berlin*, 1863–74. 8vo. and folio.
- Theil 1. Die Quellen. Brunnen, Wasserleitungen und Fundirungen. 2 Bde.
 2. Die Ströme. Uferschälungen, Strombauten, und Schiffahrts-Canäle. 4 Bde.
 3. Das Meer. Seeufer- und Hafen-Bau. 4 Bde.
- Messung des Widerstandes den Planscheiben erfahren, wenn sie in normaler Richtung gegen ihre Ebenen durch die Luft bewegt werden. *Berlin*, 1874. 4to.
(From the Abhandlungen der Akademie zu Berlin.)
- Die Preussische Ostsee-Küste, in betreff der Frage, ob dieselbe eine Hebung oder Senkung bewerken lässt. *Tract.* 4to. vol. 73. *Berlin*, 1866. 4to.
- Ueber das Gesetz, wonach die Geschwindigkeit des strömenden Wassers mit der Entfernung vom Boden sich vergrössert. *Tract.* 4to. vol. 76. *Berlin*, 1871. 4to.
(From the Abhandlungen der Akademie zu Berlin.)
- Ueber den Einfluss der Temperatur auf die Bewegung des Wassers in Röhren. *Berlin*, 1854. 4to.
- Ueber den Seitendruck der Erde. *Tract.* 4to. vol. 76. *Berlin*, 1871. 4to.
(From the Abhandlungen der Akademie zu Berlin.)
- Ueber die Bewegung des Wassers in cylindrischen, nahe horizontalen Leitungen. *Tract.* 4to. vol. 76. *Berlin*, 1870. 4to.
(From the Abhandlungen der Akademie der Wissenschaften.)
- Ueber die Bewegung des Wassers in Strömen. *Tract.* 4to. vol. 76. *Berlin*, 1868. 4to.
(From the Abhandlungen der Akademie zu Berlin.)
- Ueber die Durchdämmung der Oster-Schelde. *Tract.* 8vo. vol. 252. 1867. 8vo.
- Ueber die Oberfläche der Flüssigkeiten. *Tract.* 4to. vol. 76. *Berlin*, 1845. 4to.
(From the Abhandlungen der Akademie zu Berlin.)
- Ueber Fluth und Ebbe in der Ostsee. *Tract.* folio. vol. 34. *Berlin*, 1857–59. 4to.
(From the Abhandlungen der Akademie zu Berlin.)
- Ueber Form und Stärke gewölbter Bogen und Kuppeln. *Tract.* 8vo. vol. 258. *Berlin*, 1874. 8vo.

- HAGEN, G.—*continued*. Ueber Wellen auf Gewässern von gleichmässiger Tiefe. *Berlin*, 1862. 4to.
(From the *Abhandlungen der Akademie der Wissenschaften zu Berlin*.)
- Untersuchungen über die gleichförmige Bewegung des Wassers. *Berlin*, 1876. 8vo.
- Zur Frage über das deutsche Maass. *Tract. 8vo. vol. 247.* *Berlin*, 1861. 8vo.
- Zur Theorie der Meereswellen. [] 8vo.
- G. Hagen, zum Gedächtniss. *Tract. folio. vol. 42.* *Berlin*, 1884. folio.
- HAGEN, L. Bericht über eine bauwissenschaftliche Studienreise nach der pommerschen Küste ausgeführt unter der Leitung des Herrn L. Hagen im April, 1885. *Berlin*, 1887. 8vo.
- Sammlung ausgeführter Dampfbagger, Baggerprähme und Dampfbugsirboote, etc. Pt. II. (Atlas of Plates.) *Berlin*, 1887. 8vo. and folio.
- HAGENBUCH, —. Carte générale des chemins de fer de France. Nouvelle édition. *Paris*, 1847. 8vo.
- HAGER, J. S., and HOLDEN, E. S. Addresses on the occasion of the Inauguration of the President of the University of California. *Sacramento*, 1886. 8vo.
- HAGGARD, F. T. Arguments against the use of continuous self-acting Railway Brakes. *Tract. 8vo. vol. 318.* 1880. 8vo.
- A Mile of Railway in the United Kingdom, 1869. *Tract. 8vo. vol.* *Lond.* 1869. 8vo.
- Railways; simplicity v. complexity, or, simple and self-acting continuous Brakes. *Tract. 8vo. vol. 340.* *Lond.* 1882. 8vo.
- HAGGARD, W. D. Observations on the Standard of Value and the circulating medium of this country. 2nd edition. *Tract. 8vo. vol. 76.* *Lond.* 1847. 8vo.
- HAGUE. Kamer van Koophandel, te 's Gravenhage. Adres aan den raad der Gemeente. *Tract. 8vo. vol. 173.* [*'s Gravenhage*, 1846?] 8vo.
- HAGUE, A. Geology of the Eureka District, Nevada. With an atlas. [*U.S. Geol. Survey. Monograph XX.*] *Washington*, 1892. 4to.
- HAGUE, A., and IDDINGS, J. P. On the Development of Crystallization in the Igneous Rocks of Washoe, Nevada, with notes on the Geology of the district. [*U.S. Geol. Survey. Bulletin No. 17.*] *Washington*, 1885. 8vo.
- HAID, M. Untersuchung der Senkung des Bodensee-Pegels zu Konstanz. *Tract. 4to. vol. 117.* *Karlsruhe*, 1891. 4to.
- HAIG, F. T., *Capt., R.E.* Notes on the River Navigations of North America. *Madras*, 1863. 8vo.
- Report on Godavari River, 1857. See INDIA.—GODAVARI.

- HAINAUT, *Province of*. Cahier des charges, 1879. Ponts et chaussées. Canaux houillers. *Tract. folio. vol. 28.* 1879. folio.
- Rapport du directeur de la 1^{re} division des mines sur la situation de l'industrie minérale et métallurgique pendant les années 1879-1887. *Frameries*, 1880-88. 8vo.
- HAINES, C. G. Public documents relating to the New York Canals, which are to connect the western and northern lakes with the Atlantic ocean, *etc.* *New York*, 1821. 8vo.
- HAIR, T. H. Sketches of the Coal Mines in Northumberland and Durham. *Lond.* 1839. 4to.
- HAKEWILL, A. W. Modern Tombs: or, gleanings from the public cemeteries. Part I. *Lond.* 1849. 4to.
- HALASZ, A. The respective uses of Waterways and Railroads in the transport trade of Hungary. [5th Int. Cong. Int. Nav.] *[Paris, 1892.]* 8vo.
- HALDANE, J. W. C. Civil and Mechanical Engineering popularly and socially considered. *Lond.* 1887. 8vo.
- — 2nd edition, enlarged. *Lond.* 1890. 8vo.
- Steamships and their Machinery, from first to last, *etc.* *Lond.* 1893. 8vo.
- HALE, W. Treatise on the Comparative merits of a Rifle-Gun and Rotary Rocket. *Tract. 8vo. vol. 299.* *Lond.* 1863. 8vo.
- Treatise on the Mechanical Means by which Vessels are propelled by Steam power. *Lond.* 1868. 8vo.
- HALES, S. A description of Ventilators, whereby fresh air may be conveyed into mines, gaols, ships, *etc.* *Lond.* 1743. 8vo.
- HALES, W. Sonorum doctrina rationalis et experimentalis, ex Newtoni . . . methodo elementaria congesta: cui præmittitur disquisitio de ære et modificationibus atmosphæræ. *Tract. 4to. vol. 26.* *Dublinii*, 1778. 4to.
- HALES, W. P. Earthwork Tables. *Auckland*, [1881 ?] 8vo.
- Permanent Way of Railways: a short practical description, *etc.* *Hobart*, 1889. 8vo.
- HALFELD, H. G. F. Atlas e relatorio concernente a exploração do Rio de S. Francisco desde a cachoeira da Pirapóra até ao Oceano Atlantico, *etc.* *Rio de Janeiro*, 1860. folio.
- HALIFAX, N.S. Halifax and Bermuda Submarine Telegraph. Copy of Contract dated 12th April, 1889. *Lond.* 1889. folio.
- Specifications for Halifax Sewer Works. *Tract. 8vo. vol. 24.* *[Halifax, 1874 ?]* folio.
- HALKYN. Report on an Explosion at Halkyn: by Major. A. Ford. *Lond.* 1878. folio.
- Report on an Explosion of Dynamite at Halkyn, *etc.* *Lond.* 1879. folio.

HALL, BASIL, *Capt., R.N.* On the proper method of laying down a ship's track on sea charts, with some remarks on the importance of time-keepers in Navigation. *Tract. 8vo. vol. 26.*

(From the *Edinb. Phil. Journal.*) *Edinburgh*, 1820. 8vo.

HALL, Sir BENJAMIN. Letters to "The Times" on the attacks made by Sir B. Hall, M.P., President of the General Board of Health, and the Registrar-General on the waterworks companies of London. By a Civil Engineer and Architect. *Tract. 8vo. vol. 152.* *Lond.* [1855.] 8vo.

HALL, C. E. The Treatment of small Coal. *Tract. 4to. vol. 94.* [*Sheffield*, 1884?] 4to.

HALL, C. F. Narrative of the North Polar Expedition: U.S. Ship "Polaris," Captain C. F. Hall commanding, *etc.* *Washington*, 1876. 4to.

— Narrative of the second Arctic Expedition made by C. F. Hall: his voyage to Repulse Bay, sledge journeys to the Straits of Fury and Hecla and to King William's Land, and residence among the Eskimos, *etc.* *Washington*, 1879. 4to.

HALL, E. Metropolitan Communications and Thames Bridges. *Tract. 8vo. vol. 117.* *Lond.* 1857. 8vo.

HALL, HENRY. Vocabularies of technical terms, in eight languages. 3 pts. in 1 vol. *Lond.* 1865. 12mo.

HALL, HENRY. The Ice Industry of the United States. [*U.S.A., 10th Census*, vol. 22.] *Washington*, 1888. 4to.

— Report on the Ship-building Industry of the United States. [*U.S.A., 10th Census*, vol. 8.] *Washington*, 1884. 4to.

HALL, HENRY, *F.R.G.S.* Southern Africa, including the Cape Colony, Natal, and the Dutch Republics. *Tract. 8vo. vol. 355.* *Lond.* 1876. 8vo.

HALL, J. G., *Lieut., R.E.* Lectures. Remarks on Locomotives for ascending steep inclines with sharp curves. *Tract. 8vo. vol. 243.* *Chatham*, 1864. 8vo.

HALL, JAMES, and OTHERS. Beverley and Barmston Drainage. Report upon the condition and practicable means of improving this Drainage. *Tract. 8vo. vol. 203.* *Lond.* 1859. 8vo.

HALL, JOHN. Letter to the worshipful Committee of the Corporation of London, for carrying into execution the Acts of Parliament for rendering more commodious and for better regulating the Port of London, upon the subject of the obstructions to the navigation of the river Thames between Deptford and London bridge. *Tract. 8vo. vol. 21.* *Lond.* 1827. 8vo.

HALL, JOSEPH. The Iron question considered . . . With special reference to the Bessemer process. *Lond.* 1857. 8vo.

HALL, JULIEN A. Right of Way for Railroads. *Tract. 8vo. vol. 532.* [*New York*, 1891.] 8vo.

- HALL, M. Principles of the Sewerage of London and other large cities, with suggested works on the Thames. 2nd edition. *Tract.* 8vo. vol. 106. *Lond.* 1852. 8vo.
- HALL, R. G. Rights of the Crown and Privileges of the Subject in the Sea Shores of the Realm. 2nd edition, by R. L. Loveland. *Lond.* 1875. 8vo.
- HALL, S. Address to the British Association by S. Hall explanatory of the injustice done to his improvements on steam engines by Dr. Lardner. *Tract.* 4to. vol. 37. *Liverpool,* 1837. 4to.
- Address to Lord W. Bentinck, chairman of the select committee of the House of Commons, on steam communication with India, on that part of the evidence relating to S. Hall's patent improvements on steam-engines. *Tract.* 4to. vol. 38. *Nottingham,* 1838. 4to.
- Description of patent reefing Paddle Wheels. *Tract.* 4to. vol. 38. *Lond.* 1841. 4to.
- Extracts from the specification of patent of 24th of June, 1836, for improvements in propelling vessels: and in steam-engines, etc. *Tract.* 4to. vol. 37. *Nottingham,* 1837. 4to.
- Improvements on Steam-engines, etc. *Tract.* 8vo. vol. 22. *Nottingham,* [1840?] 8vo.
- Patent improvements in Steam-engines. *Tract.* 4to. vol. 37. *Liverpool,* [1840?] 4to.
- Refutation of the report of 9th August, 1842, of Mr. J. Kearsley, to the committee of management of the Midland Counties Railway, respecting his patent apparatus for the consumption of coal without smoke in locomotive engines. *Tract.* 8vo. vol. 62. *Lond.* 1842. 8vo.
- HALL, T. G. A Treatise on Plane and Spherical Trigonometry. 4th edition. *Lond.* 1848. 8vo.
- A treatise on the Differential and Integral Calculus, and the calculus of variations. 4th edition. *Lond.* 1846. 8vo.
- HALL, T. M. The Mineralogist's Directory; or, a guide to the principal mineral localities in the United Kingdom. *Lond.* 1868. 8vo.
- HALL, T. Y. Papers on the Safety Lamp, for the use of coal-miners; on improvement in working collieries; and on the means of penetrating dangerous gases. *Various dates.* 8vo.
- HALL, W. Patent Railway Brake apparatus. *Tract.* 8vo. vol. 117. *Erith,* 1859. 8vo.
- Specification of apparatus for working Railway Brakes. *Tract.* 4to. vol. 31. *Lond.* 1858. 4to.
- HALL, W. H. Irrigation Development, etc. (Irrigation in California [Southern].) Report of the State Engineer of California (W. H. Hall), etc. 1886-88. See CALIFORNIA.

- HALL, W. H.—*continued*. Memorandum concerning the improvement of the Sacramento River, addressed to J. B. Eads and G. H. Mendell, August, 1880. *Tract. 8vo. vol. 455.*
Sacramento, 1880. 8vo.
- The Sewage Question in California. *Tract. 8vo. vol. 358.*
Sacramento, 1883. 8vo.
- HALL, W. H., and PERKINS, G. C. The Irrigation Investigation by the State Engineering Department. Correspondence concerning the publication of its results. *Tract. 8vo. vol. 455.*
Sacramento, 1882. 8vo.
- HALL, W. S. Tables of local land, square, and solid Measures converted into statute measure; with a new table of chords for laying down angles without a protractor. *Lond. 1832. 8vo.*
- HALL END COLLIERY. Report on Explosion, September 6th, 1884. *Lond. 1885. folio.*
- HALLAUER, O. Analyse de deux machines Corliss de mêmes dimensions avec et sans enveloppe de vapeur. *Tract. 8vo. vol. 242.*
Mulhouse, 1873. 8vo.
- Compression de la vapeur dans les espaces nuisibles des machines Woolf; son influence sur les consommations de vapeur. *Tract. 8vo. vol. 250.*
Mulhouse, 1875. 8vo.
- Étude de trois moteurs pourvus d'une enveloppe ou chemise de vapeur. *Tract. 8vo. vol. 242.*
Mulhouse, 1873. 8vo.
- Moteurs à vapeur. Étude pratique sur l'échappement et la compression de la vapeur dans les machines. *Tract. 8vo. vol. 470.*
Paris, 1883. 8vo.
- Note sur la construction du thermomètre différentiel à air. Disposition adoptée par M. G.-A. Hirn. Application de cet appareil à la physique expérimentale industrielle. *Tract. 8vo. vol. 248.*
Mulhouse, 1874. 8vo.
- Note sur les variations du vide ou contre-pression dans les cylindres des machines à vapeur. *Tract. 8vo. vol. 250.*
Mulhouse, 1875. 8vo.
- Thermodynamique appliquée. Réfutations d'une . . . critique, etc. 1883. See HIRN, G. A., and HALLAUER, O.
- HALLE. Der IV. allgemeine deutsche Bergmannstag in Halle (Saale) . . . September, 1889. Festbericht und Verhandlungen. *Halle, 1890. 8vo.*
- HALLECK, H. W., *Lieut.* Bitumen: its varieties, properties and uses. [*Prof. Papers, Corps of Engineers, U.S. Army. No. 1.*]
Washington, 1841. 8vo.
- HALLETT, H. S. Address upon Burmah: our gate to the markets of Western and Central China, treating with the proposed connection of Burmah with China by railway. *Tract. 8vo. vol. 445.*
Lond. 1887. 8vo.

- HALLETT, H. S.—*continued*. Address upon Eastern Markets for Lancashire, treating with India and Burmah, *etc.* 2 pts. *Tract.* 8vo. vol. 476. *Lond.* 1889. 8vo.
- Address upon New Markets and Extension of Railways in India and Burmah. *Tract.* 8vo. vol. 435. *Lond.* 1887. 8vo.
- Indian Railways and British Trade. *Tract.* 8vo. vol. 482. *Manchester,* 1889. 8vo.
- Report on the railway connection of Burmah and China. 1887. See COLQUHOUN, A. R., and HALLETT, H. S.
- The Rival Routes to China. *Tract.* 8vo. vol. 462. *Lond.* 1888. 8vo.
- HALLETT, J. H. On the causes and remedies of Corrosion in Marine Boilers. *Tract.* 8vo. vol. 357. *Lond.* 1884. 8vo.
- HALLETT, W. H. The Brighton Waterworks. *Tract.* 8vo. vol. 506. *Brighton,* 1890. 8vo.
- HALLETTE, A. A. Hallette: funérailles et biographie. *Tract.* 8vo. vol. 115. 1846. 8vo.
- Rapport sur les expériences faites à Arras, pour juger les procédés appliqués par M. Hallette à la propulsion atmosphérique, *etc.* *Tract. folio.* vol. 11. (Lithographed.) [Paris, 1845?] folio.
- Tube propulseur Hallette. Système d'exécution et d'exploitation des chemins de fer par la pression atmosphérique. *Tract.* 8vo. vol. 77. [1846.] 8vo.
- HALLIDAY, G. Mechanical Graphics: a second course in Mechanical Drawing, *etc.* *Lond.* 1889. 8vo.
- HALLIDIE, A. S. Hallidie system of Cable. *Tract.* 4to. vol. 85. *Lond.* [1882.] 4to
- HALLIWELL, J. O. A few notes on the history of the discovery of the Composition of Water. *Tract.* 8vo. vol. 407. *Lond.* 1840. 8vo.
- Rara mathematica; or, a collection of treatises on the mathematics and subjects connected with them, from ancient inedited manuscripts. *Lond.* 1839. 8vo.
- HALLOVES, J. Romney Marsh. Expenses of the wall from 1810 to 1837 inclusive. *Tract.* 8vo. vol. 194. *Folkestone,* 1837. 8vo.
- HALPIN, D. Proposed Floating Dock at Barcelona. *Tract.* 8vo. vol. 348. *Lond.* 1878. 8vo.
- Reports . . . on D. Halpin's system of Thermal Storage of Energy. *Tract.* 8vo. vol. 529. *Lond.* 1893. 8vo.
- HALSEY, F. A. Slide Valve Gears: an explanation of the action and construction of plain and cut-off Slide Valves. *New York,* 1890. 8vo.
- HALSTED, E. P., *Rear-Admiral*. The Armstrong gun: a rejoinder to the letter of Sir William Armstrong, 27th November, 1861. Published in the *Times*. *Tract.* 8vo. vol. 214. *Westminster,* 1862. 8vo.

- HALSTED, E. P., *Rear-Admiral*.—*continued*. The "Devastation" professionally examined as a "fighting machine." Three letters.—*Tract. folio. vol. 22.* [1873.] folio.
- England's Navy unarmed. A series of letters to the First Lord of the Admiralty and in the *Daily News*. 2nd edition, with addenda. *Tract. 8vo. vol. 147.* Westminster, 1864. 8vo.
- The Navy unarmed still. An appeal to both Houses of Parliament in a series of letters to the *Daily News*. *Tract. 8vo. vol. 147.* Westminster, 1865. 8vo.
- Iron-cased ships. A series of lectures delivered before the Royal United Service Institution. *Tract. 8vo. vol. 122.* Lond. 1861. 8vo.
- The Screw-fleet of the Navy. Lond. 1850. 8vo.
- A Turret Navy for the future: an appeal to the Parliament of 1866. *Tract. 4to. vol. 52.* 1866. 4to.
- HALY, G. T., *Colonel*. Orissa: its present state. *Tract. 8vo. vol. 176.* Lond. 1866. 8vo.
- Remarks on Cholera, etc. *Tract. 8vo. vol. 182.* Lond. 1866. 8vo.
- HAM, G. Illustrated Handbook of the Eastern Bengal Railway. *Tract. 4to. vol. 89.* Calcutta, 1862. 4to.
- HAMBURG. [Collection of documents relating to the Waterworks of Hamburg, by W. Lindley and others.] *Hamburg, 1846–51.* 4to.
- Die Hafenanlagen auf dem Grasbrook. Ein Denkschrift der Commerz-Deputation, etc. *Hamburg, 1858.* folio.
- HAMEL, J. Bishop Watson and the Electric Telegraph. *Tract. 8vo. vol. 136.* Lond. 1861. 8vo.
- Historical account of the introduction of the galvanic and electro-magnetic Telegraph. *Tract. 8vo. vol. 127.* Lond. 1858. 8vo.
- HAMILTON, G. E. Report on the Turnpike Road from Sandon (through Leek) to Hugbridge, in the County of Stafford. *Tract. 4to. vol. 4.* Shrewsbury, 1827. 4to.
- Report to the Commissioners of the second district of the Turnpike Road from Coleshill, through the city of Lichfield and town of Stone, to the end of the county of Stafford. *Tract. 4to. vol. 4.* Shrewsbury, 1825. 4to.
- HAMILTON, H. International English and French Dictionary, 1869. See SMITH, L., and HAMILTON, H.
- HAMILTON, H., and LEGROS, E. Dictionnaire international français-anglais, etc. Paris, 1865. 8vo.
- — [Another edition.] Paris, 1869. 8vo.
- HAMILTON, H. P. An analytical system of Conic Sections. 5th edition. Cambridge, 1843. 8vo.
- HAMILTON, T. Letter to the Earl of Kimberley on the subject of the Queensland Steel Rail Contracts. *Tract. folio. vol. 31.* Lond. 1882. folio.

- HAMILTON, *Sir* W. Observations on Mount Vesuvius, Mount Etna and other volcanoes. *Lond.* 1773. 8vo.
- HAMILTON, W. G. Useful information for Railway Men. 4th edition. *New York*, 1872. 16mo.
- HAMILTON, W. R. Address to the Royal Geographical Society . . . preceded by the addresses on presenting the medals awarded by the Council of the Society. *Tract.* 8vo. vol. 68. *Lond.* 1843. 8vo.
- HAMILTON ASSOCIATION. Journal and Proceedings. vol. 1. Part 2. *Hamilton*, 1885. 8vo.
- HAMMERSMITH BRIDGE. Remarks on the proposed measure of building a Bridge over the River Thames at Hammersmith, *etc.* *Tract.* 8vo. vol. 224. *Lond.* 1824. 8vo.
- HAMMON, H. J. The Architectural Antiquities, and present state of Crosby Place, London. *Lond.* 1844. 4to.
- HAMMOND, A. The rudiments of practical Bricklaying . . . 5th edition. [*Practical Brick and Tile Book*, Part 2.] *Lond.* 1885. 8vo.
- HAMMOND, G. C., *Lieut., R.N.* Bay of Bengal, Orissa Coast. False Point anchorage and entrances of the Bacood Creek and Jumboo and Mahanuddy rivers. Map. *Lond.* 1878. 8vo.
- HAMMOND, H. Report on the Cotton Production of the State of South Carolina, with a Discussion of the General Agricultural Features of the State. [*U.S.A. 10th Census*. Vol. 5 and 6.] *Washington*, 1884. 4to.
- South Carolina, *etc.* *South Carolina*, 1883. 8vo.
- HAMMOND, H. W. Report on the lighter navigation of the River Neva and Gulf of Finland. *Lond.* 1879. 8vo.
- HAMMOND, J. On the Syzygies of the Binary Sextic and their relations. *Tract.* 4to. vol. 96. [*Baltimore*, 1885.] 4to.
- HAMMOND, JOHN. The practical Surveyor, *etc.* *Lond.* 1725. 8vo.
- HAMMOND, JOHN. Letters Patent for the Invention of "An improved method of and apparatus for the complete purification of Coal Gas by concentrated Liquid Ammonia, and the recovery of Sulphur and Ammonia for the manufacture of Sulphuric Acid and Sulphate of Ammonia." *Tract.* 4to. vol. 106. *Lond.* 1878. 4to.
- HAMMOND, R. The Electric Light in our Homes. *Lond.* [1884.] 8vo.
- Municipal Electricity Works. *Tract.* 8vo. vol. . . . [*Lond.* 1893.] 8vo.
- HAMPDEN, J. After all the commotion, John Hampden triumphant! always has been and always means to be. *Tract.* 8vo. vol. 212. *Chippenham*, 1871. 8vo.
- Experimental proofs that the Surface of standing Water is not convex. 1870. See ANONYMOUS.

- HAMPDEN, J.—*continued*. God's Truth or Man's Science. 1870.
See ANONYMOUS.
- Is water level or convex after all? The Bedford canal swindle detected and exposed. *Tract. 8vo. vol. 194.*
Swindon, 1870. 8vo.
- The New Manual of Biblical Cosmography. *Tract. 8vo. vol. 269.*
Lond. 1877. 8vo.
- HAMPSTEAD. Vestry of the Parish of St. John, Hampstead. Surveyor's report on the drainage of Frognaal and Oak Hill Park. *Tract. 8vo. vol. 511.*
[Lond.] 1892. 8vo.
- HAMPTON. An Act for the improvement of the road from Hampton to Staines. *Lond. 1773. folio.*
- HAMPTON GAY CANAL. See LONDON AND WESTERN CANAL.
- HANARTE, G. La perforation mécanique et les nouvelles machines à air comprimé à détente. *Mons, 1879. 8vo.*
- Résultats théoriques et pratiques destinés à l'emploi de l'air comprimé. *Mons, 1879. 8vo.*
- HANCOCK, W. N. Report on a plan for the State purchase of railways in Ireland. *Tract. 8vo. vol. 302. Dublin, 1867. 8vo.*
- HANDLEY, H. A letter to Earl Spencer, on the formation of a National Agricultural Institution. *Tract. 8vo. vol. 61.*
Lond. 1838. 8vo.
- HANDLEY, H. J. Design for a Lattice Girder Bridge to replace the present Suspension Bridge at Chitpore. *[Map folding in 4to.] 1817. folio.*
- HANDYSIDE, H. A Treatise on a safe and improved method for overcoming Steep Gradients on Railways. *Tract. 8vo. vol. 256. Bristol, 1875. 8vo.*
- A Treatise on an improved method for overcoming steep gradients on Railways. *Tract. 8vo. vol. 238. Lond. 1874. 8vo.*
- HANKS, A. J. The Smokeless Grates and Furnaces at South Kensington. *Tract. 8vo. vol. 353. Lond. 1882. 8vo.*
- HANLEY. Report on the burning of fireworks in Hanley, 6 March, 1882. By Col. V. D. Majendie, C.B. *Lond. 1882. folio.*
- HANN, J. A short Treatise on the Steam-Engine. Part I. *Lond. 1847. 8vo.*
- Theoretical and practical Mechanics, designed principally for practical men. *Lond. 1848. 8vo.*
- HANN, J., and GENER, P. and J. The Steam Engine for practical men, etc. *Paris and Lond. 1854. 8vo.*
- HANNYNGTON, J. C., *Maj.-Gen.* Haversines, natural and logarithmic, used in computing lunar distances for the Nautical Almanac. *Lond. 1876. folio.*

- HANOVER.—*Architekten- und Ingenieur-Verein*. Katalog der gebundenen Werke der Bibliothek des Vereins. *Tract. 8vo. vol. 405.*
Hannover, 1876–85. 8vo.
- Jahres-Nachtrag zum Katalog der gebundenen Werke der Bibliothek, 1864, 1865, 1877, 1878, etc. *Tract. 8vo. vol. 472.*
Hannover, 1866, etc. 8vo.
- *Königliche Technische Hochschule*, formerly *Polytechnische Schule*. Programm für das Studienjahr 1868–69(–92).
Hannover, 1868–91. 8vo.
 (1881–82 and 1884–85 wanting.)
- Katalog der Bibliothek der Polytechnischen Schule zu Hannover.
Hannover, 1868. 8vo.
- Katalog der Bibliothek der Königlichen Technischen Hochschule zu Hannover.
Hannover, 1893. 8vo.
- Verfassung. *Tract. 8vo. vol. 405.* *Hannover, 1871. 8vo.*
- HANS, M. Mémoire sur les travaux de canalisation de la Meuse entre Namur et la frontière française. *Tract. 8vo. vol. 322.*
Bruzelles, 1880. 8vo.
- Notice sur le modèle des barrages de la Meuse exposé par le Département des travaux publics. *Namur, 1876. 8vo.*
- HANSARD. Hansard's Parliamentary Debates. See PARLIAMENTARY PAPERS.—[*Debates.*]
- HANSCOM, W. W. Cable Railway Propulsion. *Tract. 8vo. vol. 376.*
San Francisco, 1884. 8vo.
- HANSEN, P. The Breakwater and Port of Middelgrunden Fort in the Sound. [2nd Int. Mar. Congr.] [Lond. 1893.] 8vo.
- HANSEN, P. A. Tables de la lune, construites d'après le principe Newtonien de la gravitation universelle. *Londres, 1857. 4to.*
- HANSFORD, R., and KÜHL, C. Commission Européenne du Danube. Carte du Danube et de ses embranchements entre Braïla et la mer, levée en 1870–1871, sous la direction de Sir Charles A. Hartley.
Leipzig, 1887. 4to.
- HANSEN, C. J. Reform in Pyrological Terms and Calculations. *Tract. 4to. vol. 111.*
 [Lond.] 1889. 4to.
- The Mechanical Equivalent of Heat. *Tract. 8vo. vol. 457.*
 [Lond.] 1888. 8vo.
- A System of International Measure and Weight. *Tract. folio. vol. 47.*
Copenhagen, 1891. folio.
- HANTS AND BERKS CANAL. Observations upon the Evidence adduced before the committee of the House of Commons, upon the late application to Parliament for a bill for making a navigable Canal, from the River Kennet, at Midgham, to join the Basingstoke canal; to be called the Hants and Berks Canal, etc. *Tract. 8vo. vol. 66.*
Maidenhead, 1825. 8vo.
- The Berks and Hants Canal. *Tract. 8vo. vol. 98.*
 [Lond. 1825?] 8vo.

- HANUS, P. A., and BISTON, V. *Manuel du charpentier*. 2^{me} édition. Paris, 1829. 12mo.
- HARBEN, H. *The Weight Calculator*. 3rd edition, corrected. Lond. 1876. 8vo.
- HARBORD, H. *The Circle Squared*. *Tract*. 8vo. vol. 245. Hull, 1874. 8vo.
- *Construction of the Perfect Ellipse*. *Tract*. 8vo. vol. 245. 1874. 8vo.
- HARCOURT, A. G. V. *Cantor Lectures on the Chemistry of Gas Manufacture, etc.* Lond. 1877. 8vo.
- HARCOURT, A. G. V., and MADAN, H. G. *Exercises in Practical Chemistry*. Series 1. *Qualitative analyses*. 2nd edition. Oxford, 1872. 8vo.
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- HARDAWAY, B. H. *Pocket Book of Tables and Formulæ for Railroad Engineers, etc.* New York, 1886. 8vo.
- HARDIE, D. *Taxation of Coals, considered in an address to the inhabitants of the cities of London and Westminster, and all places supplied with coals from the port of London*. *Tract*. 8vo. vol. 34. Lond. 1793. 8vo.
- HARDING, C. W. *System of Floating Telegraph Stations*. *Tract*. 4to. vol. 110. King's Lynn, 1883. 8vo.
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- *Loughs Corrib, Mask, and Carra District. Estimate of the cost of proposed works of navigation, and schedule of apportionment on the lands in the above district*. Dublin, 1846. 8vo.
- HARDING, W. *Facts bearing on the progress of the Railway System of Great Britain*. *Tract*. 8vo. vol. 82. Lond. 1848. 8vo.
(From the Journal of the Statistical Society.)
- *The Gauge Question: evils of diversity of gauge, and a remedy*. 4th edition. *Tract*. 8vo. vol. 70. Lond. 1846. 8vo.
- *On the Resistances to Railway Trains at different Velocities*. *Tract*. 8vo. vol. 500. Lond. 1846. 8vo.
(From Min. Proc. Inst. C.E.)
- HARDINGE, W. H. F. *Key to British Lighthouse chart*. Lond. 1874. 8vo.
- HARDINGHAM, G. G. M. *The adumbration of Inventions, etc.* *Tract*. 8vo. vol. 531. Lond. 1893. 8vo.
- *Patents for Inventions, and how to procure them*. Lond. 1891. 8vo.
- *Practical Aëronautics*. *Tract*. 8vo. vol. 224. Lond. 1871. 8vo.
- *Trade Marks: notes on the British, foreign and colonial laws relating thereto*. Lond. 1881. 8vo.

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- Paddington. Sanitary report for the year 1871-2. *Tract.* 8vo. vol. 232. *Lond.* 1872. 8vo.
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- HARLACHER, A. R. Beiträge zur Hydrographie des Königreiches Böhmen. (Imperfect.) *Prag*, 1872-75. 8vo.
- Bericht über die bis Ende 1879 ausgeführten hydrometrischen Arbeiten, nebst den Wasserstandsbeobachtungen in den Jahren 1875, 1876. *Prag*, 1880. 8vo.
- Die hydrometrischen Beobachtungen im Jahre 1877(-86). *Prag*, 1881-88. 4to.
- Exposition Universelle de 1878. Appareils et travaux hydrométriques. Études hydrologiques. *Tract.* 4to. vol. 81. *Paris*, 1878. 4to.
- Hydrographische Karte des Königreiches Böhmen. *Tract.* folio. vol. 35. *Prag*, 1878. folio.
- Die hydrometrischen Arbeiten in der Elbe bei Tetschen. (*Hydrographische Commission des Königreiches Böhmen.*) *Prag*, 1883. 4to.
- Die Messungen der Elbe und Donau, und die hydrometrischen Apparate und Methoden des Verfassers. *Leipzig*, 1881. 4to.
- Die Methode und der Apparat von Harlacher, Henneberg und Smreker zur directen Messung von Geschwindigkeiten. *Tract.* 8vo. vol. 446. *Prag*, 1884. 8vo.
- HARLEM RIVER BRIDGE. Plans. *New York*, 1886. folio.
- HARLOW, J. H. A Specimen of Cast Iron Pipe. *Tract.* 8vo. vol. 466. [*Philadelphia* ?] 1884. 8vo.
- HARMAN, F. E. The agricultural condition of Mysore prior to the famine of 1876-87. *Tract.* 8vo. vol. 269. *Madras*, 1877. 8vo.
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Lond. 1883. 8vo.
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- HARRINGTON, M. W. *Notes on the Climate and Meteorology of Death Valley, California.* [*U.S. Dep. of Agriculture, Weather Bulletin 1.*] *Washington*, 1892. 8vo.
- HARRIS, A. W. *See* SOUTHAMPTON.—*Urban Sanitary Authority.* Eighteenth annual report on Vital Statistics, etc. [By A. W. Harris.] 1892.
- HARRIS, G. D. *Correlation Papers. Neocene.* 1891. *See* DALL, W. H., and HARRIS, G. D.
- HARRIS, G. F. *Granites and our granite industries.*
Lond. 1888. 8vo.
- HARRIS, H. G. *Cantor Lectures on Heat Engines other than Steam, etc.*
Lond. 1889. 8vo.
- *Continuous Brakes. Tract.* 8vo. vol. 487. *Chatham*, 1889. 8vo.
- *Petroleum as a producer of Energy. Tract.* 8vo. vol. 519.
Chatham, 1891. 8vo.
- *See* POWELL, H. J. *Principles of Glass-making.* With a treatise on Plate Glass by H. G. Harris. 1883.
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Lond. 1881, etc. 8vo.
- HARRIS, J. C. *See* INDIA.—CUTTACK. *Papers on the Cuttack Rivers, containing Capt. Harris's 2nd report.* 1858.
- HARRIS, JOHN, D.D., F.R.S. *Lexicon technicum; or, an universal dictionary of arts and sciences, etc.* 2nd edition. 2 vols.
Lond. 1708–10. folio.
- HARRIS, JOHN. *Geometrical demonstration of the ratio of the circle's circumference to the diameter.* *Lond.* 1879. 4to.
- *The Laws of Force and Motion.* Being a revision of certain prominent doctrines. 2 pts. (Appendix). *Lond.* 1890. 8vo.
- *New Views in Astronomy. Tract.* 4to. vol. 84.
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Portsea, 1841. 4to.

- HARRIS, R. L. A Coffor Dam or Caisson without timber or iron in its construction. *Tract. 8vo. vol. 528.* [New York,] 1891. 8vo.
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- HARRIS, Sir W. S. National Defences: the great question of the day. (Appendix and addendum.) *Tract. 8vo. vol. 132.*
Lond. 1862. 8vo.
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Lond. 1843. 8vo.
- Rudimentary Electricity. . . 5th edition, with considerable additions, etc. *Lond. 1859. 8vo.*
- Leçons élémentaires d'électricité, etc. *Tract. 8vo. vol. 127.*
Paris, 1857. 8vo.
- Rudimentary Magnetism. *Lond. 1850. 8vo.*
- — 2nd edition, revised and enlarged by H. M. Noad. *Lond. 1872. 8vo.*
- Rudimentary treatise on Galvanism, etc. *Lond. 1856. 8vo.*
- Shipwreck by Lightning: papers relative to Harris's Lightning Conductors. *Lond. 1852. folio.*
- A treatise on Frictional Electricity, in theory and practice. Edited, with a memoir of the author, by C. Tomlinson. *Lond. 1867. 8vo.*
- HARRISON, G. F. E. University of California. Report on Physical Training. *Sacramento, 1888. 8vo.*
- HARRISON, JOHN. Account of Proceedings to the discovery of the Longitude, etc. 1763. See ANONYMOUS.
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[Lond.] 1869. 8vo.
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Lond. 1880. folio.

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- HARRISON, T. E. Report on Westinghouse Brakes. 1879. See PARLIAMENTARY PAPERS.—[RAILWAYS.]
- HARRISON, W. W. The Mechanic's Tool-Book. With practical rules and suggestions, *etc.* New York, 1868. 12mo.
- HARRISON'S LEVEL CROSSING. Report by Col. Rich on the accident which occurred at Harrison's Level Crossing. Lond. 1877. folio.
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- Average plans of Drains, Culverts, and Bridges, with tables, *etc.* Roorkee, 1868. folio.
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- HARTFORD, Conn. Special Sewer Reports. Tract. 8vo. vol. 275. Hartford, 1877. 8vo.
- HARTIG, E. Der Elastizitätsmodul des geraden Stabes als Funktion der spezifischen Beanspruchung. Tract. 4to. vol. 117. [Leipzig, 1893.] 4to.
- Das Experiment auf dem Gebiete der mechanischen Technik. Tract. 8vo. vol. 437. Wien, 1883. 8vo.
- Die Steinkohlen Deutschlands, und anderer Länder Europas, *etc.* 1865. See GEINITZ, H. B., FLECK, H., and HARTIG, E.
- Ueber Backsteine mit hohem Kalkgehalte. Tract. 4to. vol. 116. [Leipzig, 1893.] 4to.
- Vergleichende Versuche über die Festigkeitseigenschaften metallener Gliederketten. Tract. 4to. vol. 117. [Leipzig, 1892.] 4to.
- Versuche über das Verhalten des Flusseisens und Flussstahles in grosser Kälte. 1892. See KÖPCKE, —, and HARTIG, E.
- HARTLEPOOL. Hartlepool West Harbour and Docks. [Local Acts.] Lond. 1850. folio.
- Hartlepool Gas and Water Act, 1890. Lond. 1890. folio.

- HARTLEPOOL—*continued*. West Hartlepool Harbour and Docks. Copies of Admiralty reports under Preliminary Inquiries Act. *Lond.* 1850. folio.
- HARTLEY, Sir C. A. Address to the Technical and Nautical Committees of the Trieste Harbour Commission. [MS.] *Tract.* 4to. vol. 60. 1863. 4to.
- Report on the proposed barring of the East and Sloe channels of the Schelde. *Tract.* 8vo. vol. 154. *Lond.* 1867. 8vo.
- Ribble Navigation Commission. Reports, etc. 1889–91. See NARES, Sir G. S., HARTLEY, Sir C. A., and BARRY, J. W.
- The River St. Lawrence. *Tract.* 4to. vol. 100. [Edinburgh, 1886.] 4to.
(From the Encyclopedia Britannica.)
- Les voies navigables de l'Europe. *Tract.* 8vo. vol. 419. Paris, 1885. 8vo.
- HARTLEY, Sir C. A., and OTHERS. Mouths of the Mississippi. Correspondence, etc. *Tract.* 8vo. vol. 309. *Lond.* 1874–5. 8vo.
- HARTLEY, E. Notes on Coal from Springhill, county Cumberland, Nova Scotia. *Tract.* 8vo. vol. 196. *Montreal*, 1870. 8vo.
- Report on the Coals and Iron Ores of Pictou county, Nova Scotia. *Montreal*, 1870. 8vo.
- HARTLEY, F. W. Gas Analyst's Manual. *Lond.* 1879. 8vo.
- Gas Measurement and Gas Meter Testing. *Lond.* 1882. 8vo.
- HARTLEY, JESSE. The Ladies' Memorandum Book for the Year 1797. *Lond.* 1797. 12mo.
(Contains MS. notes and skeleton diary of Jesse Hartley.)
- HARTLEY, JOHN B. Report with reference to a proposed extension of the dock accommodation of the port of Hull. *Tract.* folio. vol. 7. *Hull*, 1843. folio.
- HARTLEY, W. N. Air and its relations to Life. 2nd edition. *Lond.* 1876. 8vo.
- Cantor Lectures on Fermentation and Distillation, etc. *Lond.* 1884. 8vo.
- HARTLEY INSTITUTION, *Southampton*. The Hartley Institution and its proposed extension as a local university college. *Tract.* 8vo. vol. 508. *Southampton*, 1887. 8vo.
- HARTMANN, C. Praktisches Handbuch der Stahlfabrikation. *Weimar*, 1861. 8vo.
- HARTMANN, J. Neuere Mittheilungen über die gezogenen Kanonen in England. *Tract.* 8vo. vol. 131. [1862?] 8vo.
- Vorträge über Artillerie. Einleitung in die Balistik. *Tract.* 8vo. vol. 131. *Hannover*, 1856. 8vo.
- Vorträge über Artillerie. Von den Schiessversuchen in der Artillerie und ihrer Benutzung zur Bildung von Schusstafeln. *Tract.* 8vo. vol. 131. *Hannover*, 1858. 8vo.

- HARTMANN, W. *Theorie der Locomotiv-Tender-Kuppelungen.* Berlin, 1884. 8vo.
- Ueber die Geradföhrungen und die Proportionalität am Indikator. *Tract. folio. vol. 45.* Berlin, [1889?] folio.
- HARTNELL, W. Paper on "Electric Lighting and Fire Insurance Rules," illustrated by experiments. *Tract. 8vo. vol. 493.*
(British Association, Leeds Meeting.) Leeds, 1890. 8vo.
- HARTNUP, J. Report to the Marine Committee, and results of Meteorological Observations made at the Liverpool Observatory during the years 1884 to 1888. Liverpool, 1889. 8vo.
- HARTOP, H. A paper on the relative properties of Iron, made by the use of cold and hot air blast, in the smelting furnace. *Tract. 8vo. vol. 56.* Leeds, 1843. 8vo.
- HARTTUNG, M. The relations between the Waterway and the Railroad in the Neckar basin. [5th Int. Congr. Intl. Nav.] [Paris, 1892.] 8vo.
- HARVEY, F., *Commander, R.N.* Instructions for the management of Harvey's Sea Torpedoes. Lond. 1871. 8vo.
- HARVEY, J. Clyde Navigation. Report on the river Lighthouses. *Tract. 8vo. vol. 198.* Glasgow, 1860. 8vo.
- Remarks on the subject of a Breakwater for Portland Roads, as projected. *Tract. 8vo. vol. 75.* Weymouth, 1827. 8vo.
- HARVEY, J. R. The Royal Naval Engineers' Note Book. Arranged for the steam branch afloat. Chatham, 1888. 8vo.
- HARVEY, T. F., and ROE, —. [Description of] Harvey and Roe's Permanent Way. *Tract. folio. vol. 23.* [1877.] folio.
- HARVEY, W. F. A Simplified Grammar of the Spanish Language. Lond. 1890. 8vo.
- HARWICH AND DOVERCOURT WATERWORKS. The Harwich and Dovercourt Waterworks. The opening ceremony. *Tract. 4to. vol. 110.* [Ipswich,] 1887. 4to.
- HARWICH HARBOUR. Accounts. 1873–88. folio.
- Copies of the Report of the Engineer on the present state of the Landguard Point of Harwich Harbour. Correspondence and communications. Lond. 1862. folio.
- HARZÉ, E. Des mesures à prendre en vue des dégagements instantanés de grisou. *Tract. 8vo. vol. 406.* Bruzelles, 1885. 8vo.
- Des mines à grisou et des dépressions atmosphériques. *Tract. 8vo. vol. 343.* Bruzelles, 1881. 8vo.
- Statistique comparée. Développement de l'industrie houillère en Belgique et dans les pays voisins depuis 1831 jusqu'en 1880. *Tract. 8vo. vol. 466.* Bruzelles, 1882. 8vo.
- Statistique des mines, minières, carrières, usines métallurgiques et appareils à vapeur de Belgique pour 1882 (1884). *Tract. 8vo. vols. 391 and 406.* Bruzelles, 1884–85. 8vo.

- HASELTINE, G. Resolutions as to Patent Law reform. *Tract. folio. vol. 13.* Lond. 1871. folio.
- HASKINS, C. H. The Galvanometer and its uses. 3rd edition. *New York*, 1884. 12mo.
- HASKINS, Rev. E. H. The problem solved : or, a practical scheme of Decimal Coinage for the people. With answers to Lord Overstone's questions. *Tract. 8vo. vol. 202.* Lond. 1858. 8vo.
- HASKINS, W. Routes proposed by the South Ontario Pacific and the Toronto, Hamilton and Buffalo Railways. [*MS. Letter.*] *Tract. folio. vol. 48.* Hamilton, 1889. folio.
- Water Supply of St. Thomas, Ontario. [*MS. Letter.*] *Tract. folio. vol. 48.* Hamilton, 1889. folio.
- HASKOLL, W. D. The Assistant Engineer's Railway Guide in boring ... stumping, and nicking out centre lines and curves, setting out slopes and foundations of works ... Preceded by practical memoranda on Specifications. Lond. 1846. 8vo.
- — Part II. Containing instructions for setting out the lines and levels of Railway Works in cuttings, embankments and permanent way, bridges and viaducts ... To which have been added ten sets of experiments on the Strength of Materials by G. Rennie, etc. Lond. 1848. 8vo.
- The Engineer's, Mining Surveyor's and Contractor's Field-Book. 4th edition. Lond. 1880. 8vo.
- Examples of Bridges and Viaducts : from the contract-working drawings or admeasurements of select works. 2nd edition, etc. Lond. 1867. 4to.
- Land and Marine Surveying. 2nd edition. Lond. 1886. 8vo.
- Railway construction : from the setting out of the centre line to the completion of the works, etc. Two series. Lond. 1857-64. 4to.
- HASLEHURST, J. Second Report upon the proposed Grand Commercial Canal, having for its object the union of the Peak Forest, Sheffield, Chesterfield, and Cromford canals. *Tract. 8vo. vol. 6.* Chesterfield, 1824. 8vo.
- HASLETT, C. The Mechanic's, machinist's, and engineer's practical book of reference ; together with the Engineer's field-book. *New York*, 1871. 12mo.
- HASLINGDEN CANAL. Act for making a navigable Canal from Bury Bridge ... by Haslingden to Church Kirk, etc. Lond. 1794. folio.
- HASLUCK, P. N. Lathe Work : a practical treatise, etc. Lond. 1881. 8vo.
- Screw Threads, and methods of producing them ; with ... directions for using Screw-cutting Lathes. Lond. 1887. 64mo.

- HASSALL, A. H. Report on Microscopical Examination of the Metropolitan Water Supply. 1857. See LONDON.—[*Water Supply*.]
- HASSARD, R. On the future Water Supply of London. 1866. See HEMANS, G. W., and HASSARD, R.
- On the future Water Supply of London; more particularly with reference, as sources, to the elevated lakes of England and Wales. *Tract. 8vo. vol. 262.* Lond. 1876. 8vo.
- HASSARD, R., and TYRRELL, A. W. N. Metropolis Water Supply. On the Supply of pure Water to London. *Tract. 4to. vol. 92.* Lond. 1884. 4to.
- Metropolis Water Supply. *Tract. 8vo. vol. 523.* Lond. 1891. 8vo.
- Metropolis Water Supply. *Tract. 8vo. vol. 523.* [Lond.] 1892. 8vo.
- (Different from the preceding.)
- On the Disposal of London Sewage in the Ocean. *Tract. 8vo. vol. 496.* Lond. 1890. 8vo.
- HASSLER, F. R. Comparison of Length and Capacity, *etc.* 1832. See UNITED STATES.—[*Weights and Measures*.]
- HASTINGS, *Sussex*. Two Reports on the Water Supply of Hastings. One by the Sanitary Commission of the "*Medical Times and Gazette*," the other by the Sanitary Commission of the "*Lancet*." *Tract. 8vo. vol. 407.* St. Leonards-on-Sea, 1876. 8vo.
- HASTINGS, C. W. The Gas and Water Companies' Directory, Gas Works Statistics, and Water Works Statistics. 1883 (1886). Lond. 1883–86. 8vo.
- Gas Works Statistics for 1879 (to 1883). Lond. 1880–83. 8vo.
- HASWELL, C. H. Report of the result of Observations upon the deposit of Silt in the Harbour of New York, made during the years 1854–1857. *Tract. 8vo. vol. 199.* New York, 1857. 8vo.
- HASWELL COLLIERIES. Copy of Report of Messrs. Lyell and Faraday on the subject of the Explosion which occurred at Haswell Collieries, *etc.* Lond. 1845. folio.
- Full and authentic particulars of the dreadful Explosion at Haswell. *Tract. 8vo. vol. 284.* Sunderland, 1844. 8vo.
- HATFIELD, R. G. The American House Carpenter: a treatise on ... building and the strength of materials. 7th edition, *etc.* New York, 1868. 8vo.
- Theory of Transverse Strains and its application in the construction of buildings. New York, 1877. 8vo.
- HATIM TAÏ. The Adventures of Hatim Taï: a romance, translated from the Persian, *etc.* Lond. 1830. 4to.
- HATON DE LA GOUPILLIÈRE, J. N. Cours d'exploitation des mines. 2 vols. Paris, 1884–85. 8vo.
- Note sur la théorie des bobines d'extraction. *Tract. 8vo. vol. 466.* Paris, 1884. 8vo.

- HAUCHECORNE, G. Tableaux statistiques des chemins de fer de l'Europe en exploitation pendant l'exercice 1866. *Tract. folio. vol. 22.* Cologne, 1868. folio.
- HAUCK, G. Die Grenzen zwischen Malerei und Plastik und die Gesetze des Reliefs. *Tract. 8vo. vol. 405.* Berlin, 1885. 8vo.
- HAUCK, W. P. Die galvanischen Batterien, Accumulatoren und Thermoäulen. [*Elektro-technische Bibliothek*, Bd. IV.] Wien, 1883. 8vo.
- Les piles électriques, thermo-électriques et les accumulateurs. Deuxième édition française par G. Fournier. Paris, 1889. 8vo.
- Die Grundlehren der Elektrizität, etc. [*Elektro-technische Bibliothek*, Bd. IX.] Wien, 1883. 8vo.
- HAUDEBOURT, L. P. Le Laurentin; maison de campagne de Pline le jeune. Paris, 1838. 8vo.
- HAUENSCHILD, H., and OLSCHESKI, W. Katechismus der Baumaterialien. 3 pts. Wien, 1879–80. 8vo.
- HAUER, J. von. Die Hüttenwesens-Maschinen. (Atlas of Plates.) Zweite Auflage. 3 vols. Leipzig, 1876. 8vo.
- Die Wasserhaltungs-Maschinen der Bergwerke. Leipzig, 1879. 8vo.
- HAUER, K. von. Die fossilen Kohlen Oesterreich's: classificirt nach ihrem Formationsalter und Brennwerthe. Zweite Auflage. Wien, 1865. 8vo.
- HAUG, M. The origin of Brahmanism. *Tract. 8vo. vol. 134.* Poona, 1863. 8vo.
- HAUGER, A. Bosnien, die Herzegowina und das Feldeisenbahnenwesen. *Tract. 8vo. vol. 302.* Wien, 1878. 8vo.
- HAUGHTON, B. Address delivered to the Civil and Mechanical Engineers' Society. *Tract. 8vo. vol. 167.* Lond. 1868. 8vo.
- The Block on the Suez Canal. *Tract. 8vo. vol. 357.* Lond. 1884. 8vo.
- The Indian Railway network in 1884. *Tract. 8vo. vol. 383.* Lond. 1885. 8vo.
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- Wave Percussion. *Tract. 8vo. vol. 444.* Lond. 1887. 8vo.
- HAUGHTON, S. Account of experiments to determine the velocities of Rifle Bullets commonly used. (Appendices.) *Tract. 8vo. vol. 131.* [Dublin,] 1862. 8vo.

(Read before the Royal Irish Academy.)

HAUGHTON, S.—*continued*. Principles of Animal Mechanics. 2nd edition. Lond. 1873. 8vo.

— [For works by S. Haughton and J. A. Galbraith: See GALBRAITH, J. A., and HAUGHTON, S.]

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(Publications of the American Economic Association, Vol. V., Nos. 3 and 4.)

— The Commercial Paradox: a paper discussing certain important Problems in Transportation, etc.

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— Great Transportation Areas of the United States. *Tract*. 8vo. vol. 484.

[Philadelphia,] 1888. 8vo.

— Harbor Bar Improvements.

Philadelphia, 1889. 8vo.

- HAUPT, L. M.—*continued*. Harbor Studies. General requirements, New York Entrance, Delaware Breakwater. *Tract. 8vo. vol. 410.* [Philadelphia, 1886.] 8vo.
- How to establish a True Meridian. [Philadelphia, 1891?] 8vo.
- How to obtain a Deep-water Port on the Gulf. *Tract. 8vo. vol. 486.* [Philadelphia, 1890?] 8vo.
- Improvement of Tidal Rivers, with special application to the removal of the five mile bar in the Delaware River. *Tract. 8vo. vol. 451.* Philadelphia, 1887. 8vo.
- Jetties for Improving Estuaries. [Philadelphia,] 1888. 8vo.
- Littoral Movements of the New Jersey Coast, with remarks on Beach protection and jetty reaction. [New York,] 1890. 8vo.
(From the Trans. Am. Soc. of Civ. Eng.)
- The Manchester Ship Canal and its moral. *Tract. 8vo. vol. 535.* [Philadelphia,] 1894. 8vo.
- A Manual of Engineering Specifications and Contracts. Philadelphia, 1878. 8vo.
- Municipal Engineering: a study of Street Pavements. Philadelphia, 1889. 8vo.
- On the adaptation of Movable Dams to the Ohio and other Rivers of the United States as practised by the United States Corps of Engineers. [Philadelphia,] 1884. 8vo.
- On the best Arrangement of City Streets. [Philadelphia,] 1877. 8vo.
- On the Use of the Solar Transit. Philadelphia, [] 8vo.
- The Physical Phenomena of Harbor Entrances. *Tract. 8vo. vol. 455.* 1887. 8vo.
- Plans for the proposed improvement of the Bar at the entrance to the Rio Grande do Sul, Brazil. *Tract. 8vo. vol. 477.* [Philadelphia,] 1888. 8vo.
- The Port of Philadelphia. Philadelphia, 1892. 8vo.
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- Rapid Transit in Cities. [Philadelphia,] 1888. 8vo.
- River and Harbor Improvements, with special reference to the problem of the New York entrance. Haupt's system of Floating Deflectors, and its applicability to the hydraulics of rivers and harbors. Philadelphia, 1886. 8vo.
- Tide-Water Terminals of the Southern States. *Tract. folio. vol. 43.* [New York,] 1889. folio.
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- Working Drawings, and how to make and use them. Philadelphia, 1881. 8vo.

- HAUSER, A. Cours de construction navale, professé à l'École d'application du Génie maritime. (Atlas of Plates.)
Paris, 1886.
- HAUSER, W. Hilfs-Tabellen für die Berechnung eiserner Trichter, etc., 1888. See STÖCKL, C., and HAUSER, W.
- HAUSHOFER, K. Franz von Kobell. Eine Denkschrift. 7
4to. vol. 113. Munich, 1884.
- HAUSSMANN, G. E., Baron. Mémoires sur les eaux de Paris.
Tract. 4to. vol. 53. Paris, 1854.
- Statement to the Municipal Council of Paris, etc. Tract.
vol. 53. Lond. 1866.
- HAÛY, R. J., Abbé. Tableau comparatif des résultats de la cri-
tographie et de l'analyse chimique, relativement à la classifica-
tion des minéraux. Paris, 1809.
- Traité élémentaire de physique. 3^e édition. 2 vols. in 1.
Paris, 1821.
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- Die Sundhäfen Dänemarks und Schwedens. Tract. 4to. vol. 1
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- Projekt einer neuen Schlesisch-Märkischen Kanal-Verbind-
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- HAVEY-BISHOP, L. O. The Function of Universities, etc.
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- HAVRE. Amélioration du port du Havre et des passes de la B
Seine. Havre, 1886. 1

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- Port du Havre. Construction de deux formes de radoub. Havre, 1885–86. 4to.
- Port du Havre et passes de la basse-Seine. Rapport de la Commission d'étude des améliorations à apporter au port du Havre et aux passes de la basse Seine. Paris, 1884. folio.
- Statistique commerciale, financière et technique du Havre, 1848 et 1879. *Tract. folio. vol. 43.* Havre, 1881. folio.
- *Exposition Maritime*, 1869. Rules, etc. *Tract. 8vo. vol. 196.* Lond. 1868. 8vo.
- *Exposition Maritime*, 1887. Notice sur les modèles, cartes et dessins relatifs au service des Ponts et Chaussées. Havre, 1887. 8vo.
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- Experiments . . . of two locomotive engines, the "Collingwood" and "Exmouth," *etc.* 1840. See NICHOLSON, R., and HAWTHORN, R. W.
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- HAY, R. A Geological Reconnaissance in South-western Kansas. [*U.S. Geol. Survey.* Bulletin No. 57.] *Washington*, 1890. 8vo.
- HAYDEN, J. V. Sun Pictures of Rocky Mountain scenery; with a description of the geographical and geological features, and some account of the resources of the Great West, *etc.* *New York*, 1870. 4to.
- HAYDN, J. Dictionary of Dates . . . [Edited] by B. Vincent. 13th edition. *Lond.* 1871. 8vo.
— — — 19th edition. *Lond.* 1879. 8vo.
— — — 20th edition. *Lond.* 1892. 8vo.

- HAYES, E. How to lower Ships' Boats, *etc.* *Tract.* 8vo. vol. 111.
Lond. 1855. 8vo.
- HAYES, J. On the Fromentin automatic Boiler Feeder. *Tract.* 8vo.
vol. 409. Lond. 1882. 8vo.
- HAYES, J. D. Railway Clearing House : a system for the manage-
ment of railway traffic between competing lines to and from com-
peting points. *Tract.* 8vo. vol. 238. New York, 1871. 8vo.
- HAYLING ISLAND. An Act for incorporating the South Hayling
Bridge Company, and for empowering them to construct a Bridge
over the Langstone Channel between Hayling Island and Southsea,
etc. Lond. 1883. folio.
- HAYS, C. D. Description and specification of his improved method
of adapting auxiliary Steam Power to Sailing Vessels ; with a
journal and observations on two voyages to and from Cork ; and
some observations on the effect of attraction in compasses in iron
vessels. *Tract.* 8vo. vol. 55. Lond. 1845. 8vo.
- Journal and observations of a trial voyage in the "Experiment,"
an iron vessel . . . fitted with a rotary engine . . . and with
Mr. Hays' auxiliary steam power. *Tract.* 8vo. vol. 55.
Lond. [1845.] 8vo.
- HAYS, W. B. Description of the Glenelg pier, S. Australia ; with
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8vo. vol. 102. Lond. 1856. 8vo.
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1876, 90. See DRYSDALE, J., and HAYWARD, J. W.
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Clay in the London Basin. *Tract.* 8vo. vol. 447. 1887. 8vo.
- HAYWOOD, W. Reports made 1847–1893, to the Commissioners of
Sewers, on various matters relating to the Improvement, Health,
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- Abstracts of Tenders received for lighting the three Bridges and various thoroughfares of the City by Electricity. *Lond.* 1880. 8vo.
- Applications for an extension of the Experiments in Electric Lighting. *Lond.* 1882. 8vo.
- Preliminary Report on the Contracts for Electric Lighting. *Lond.* 1882. 8vo.
- Results of Electric Lighting in London, 1881–82. *Lond.* [1883.] 8vo.
- Report as to the Commission undertaking to supply Electricity in a District of the City, upon various proposals by Companies and others for Lighting by Electricity. *Lond.* 1885. 8vo.
- Report to the . . . Commissioners of Sewers of the City of London on failures in the Electric Lighting of the Streets for the six months ending 31st of October, 1893. *Lond.* 1893. 8vo.
- Report upon the conditions of the contracts for Lighting the public Gas Lamps (Appendix.) *Lond.* 1853. 8vo.
- Report upon the Carburation of Gas, as supplied to the public gas lamps by the process of the United Kingdom Carburing Gas Company. (Appendix.) *Lond.* 1861. 8vo.
- Report upon some of the conditions for Lighting the public Lamps. *Lond.* 1862. 8vo.
- Report on the new Gas Lamps in Queen Victoria Street. *Lond.* 1879. 8vo.
- Report on Messrs. W. Sugg and Co.'s Experimental Gas Lighting in Fleet Street. *Lond.* 1883. 8vo.
- Report on Siemens' patent experimental Gas Lighting in Holborn. *Lond.* 1883. 8vo.
- Report to the Streets Committee of the Commissioners of Sewers of the City of London, on Experimental Gas Lighting in certain Streets of the City, by the Gas Light and Coke Company, and on Experimental Oil Lighting on the Holborn Viaduct, by the Defries Safety Lamp and Oil Company. *Lond.* 1889. 8vo.
- See also* HAYWOOD, W., and LETHEBY, W. H.

PAVEMENTS.

- Answers to questions upon the subject of Pavings sent by the Metropolitan Sanitary Commission. *Lond.* 1848. 8vo.
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HAYWOOD, W.—*continued.*

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- Report upon the further application of Mr. Moffatt, to take the sewage water from the Paul's Wharf and Dowgate Dock outlet sewers, for the manufacture of dry manure. *Lond.* 1850. 8vo.
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- Report upon the Ventilation of Sewers. Appendix. *Lond.* 1858. 8vo.
- Report on Capt. Liernur's Pneumatic system of Sewerage. *Lond.* 1876. 8vo.
- Lower Thames Valley Main Sewerage Report, June, 1878. With Supplemental Report, October, 1878. (MS.) *Lond.* 1878. 8vo. and folio.
- Letter to the Lower Thames Valley Main Sewerage Board. (MS.) *Lond.* 1879. folio.
- Reasons against his Thames Valley Drainage Scheme urged by a deputation of Landowners to the Local Government Board, 1879. (MS.) 1879. folio.
- Report to the Works and Parliamentary Committee of the Lower Thames Valley Main Sewerage Board, 23rd December, 1879. (MSS.) *Lond.* 1879. folio.
- Report on the Disposal of Refuse. *Lond.* 1881. 8vo.

HAYWOOD, W.—*continued.*

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- Report on Melting Snow by Clarke's Apparatus. *Lond.* 1881. 8vo.

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— Report upon the results of experiments with certain Street Cleansing Machines, 24th January, 1890.

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Lond. 1891. 8vo.

— Reports in relation to the Advertising Stations (Rating) Act, 1891. See HAYWOOD, W., and BAYLIS, E. A.

— See also *supra*: LIGHTING. PAVEMENTS.

URINALS and WATER CLOSETS.

— Report upon public Urinals. (Appendix.) *Lond.* 1850. 8vo.

— Report upon sites proposed for public Urinals within the City of London.

Lond. 1851. 8vo.

— Description of the underground Urinals and Water Closets on the western front of the Royal Exchange.

Lond. 1885. 8vo.

— Description of the underground Urinals and Water Closets at the junction of King William Street with Gracechurch Street, etc., 1886.

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— Report upon the Provision of Closet Accommodation for Women.

Lond. 1887. 8vo.

WATER SUPPLY.

— Report upon the supply of Water to the City of London. (Appendices.)

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- An Account of the Artesian Well, sunk by the . . . Commissioners of Sewers . . . in 1887-91, at New Street, Gravel Lane, Houndsditch, *etc.* *Lond.* 1893. 8vo.
- HAYWOOD, W., and BAYLIS, E. A. Reports in relation to the Advertising Stations (Rating) Act, 1889. *Lond.* 1891. 8vo.
- HAYWOOD, W., and LETHEBY, H. Report on the existing conditions and circumstances affecting the Gas supply in the City of London. (Appendix.) *Lond.* 1865. 8vo.
- Report on the results of experiments to ascertain the Consumption of Gas at the public lamps ; and on the application of the carburating process, *etc.* *Lond.* 1862. 8vo.
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(From the Proceedings of the Brit. Assoc.)
- HAZELL, —. Hazell's Annual Cyclopædia, 1886-88, *etc.* *Lond.* 1886-88. 8vo.
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- HAZEN, H. A. The Climate of Chicago. [*U. S. Dep. of Agriculture*. Weather Bulletin 10.] *Washington*, 1893. 8vo.
- The Reduction of Air Pressure to sea level at elevated stations west of the Mississippi River. *Washington*, 1882. 4to.
(Professional Papers of the Signal Service, No. 6.)
- HEAD, Sir F. B., *Bart.* The Printer's Devil. [Description of Messrs. Clowes and Sons' printing-office.] *Lond.* [] 8vo.
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- HEAD, J., and POUFF, P. Abstract of Paper on a new form of Siemens Furnace, arranged to recover waste Gases as well as waste Heat. *Tract*. 8vo. vol. 495. *Edinburgh*, 1890. 8vo.
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- — 4th edition, revised. *Wellington*, 1886. 8vo.
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- Continental Electric Light Central Stations: with notes on the methods in actual practice for distributing electricity in towns. *Lond.* 1892. 4to.
- Precautions to be adopted on introducing the Electric Light. *Lond.* 1886. 8vo.
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- HEENAN, G. F. H. A "Résumé" on the Coal in H.H. the Nizam's Dominions. *Tract.* 8vo. vol. 315. *Hyderabad,* 1875. 8vo.
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- HEFNER-ALTENECK, H. H. von. Eisenwerke, oder Ornamentik der Schmiedekunst des Mittelalters und der Renaissance. *Frankfurt a. M.,* 1870. folio.
- HEHNER, O. Notes on Water Analysis. *Tract.* 8vo. vol. 296. *Lond.* 1878. 8vo.
- HEIM, A. and OTHERS. Die Catastrophe von Zug, 5 Juli, 1887. 11. Auflage. *Zürich,* 1888. 8vo.
- Étude géologique sur le nouveau projet de tunnel courbé traversant le massif du Simplon. *Tract.* 8vo. vol. 458. *Lausanne,* 1883. 8vo.
- HEINZ, A. v. Mittheilungen über den Franzens-Canal, etc. *Budapest,* [1886.] 4to.
- HEINE, W. Col. Le chemin de fer du Pacifique. *Tract.* 8vo. vol. 439. *Paris,* 1867. 8vo.

- HEINKE, J. W. A history of Diving from the earliest times to the present date, compiled chiefly from the researches of the late J. W. Heinke. With notes and additions by F. W. Heinke and J. Davis. *Lond.* 1870. 8vo.
- HEINZERLING, C. Die Brücken der Gegenwart. *Aachen*, 1873-76. folio.
- Die Brücken in Eisen. *Berlin*, 1870. 8vo.
- Neuere Beobachtungen und Erfahrungen über Entstehung von Explosionen in Bergwerken und Mühlen, etc. *Tract.* 8vo. vol. 328. *Offenburg*, 1881. 8vo.
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- ~~X~~ — Cantor Lectures on Friction, etc. *Lond.* 1886. 8vo.
- The Education of an Engineer, etc. *Tract.* 8vo. vol. 522. *Liverpool*, 1891. 8vo.
- Liverpool and Technical Education, etc. *Tract.* 8vo. vol. 448. *Liverpool*, 1887. 8vo.
- The Missing Link in Industrial Education: address to the delegates of the Trades' Congress, etc. *Tract.* 8vo. vol. 522. *Lond.* 1891. 8vo.
- Second Report on the Development of Graphic Methods in Mechanical Science. *Lond.* [1892.] 8vo.
(From the Report of the British Association.)
- Some remarks on the methods of Wind Measurements. *Tract.* 8vo. vol. 336. *Bristol*, 1881. 8vo.
- The Theory of certain Indicating and Recording Apparatus. *Tract.* 8vo. vol. 465. [*Bristol*, 1888?] 8vo.
- The Theory of Continuous Calculating Machines and of a mechanism of this class on a new principle. *Tract.* 4to. vol. 98. (From the Phil. Trans.) [*Lond.*] 1885. 4to.
- HELESHAW, H. S., and SHAW, E. The Sphere and Roller Mechanism for transmitting Power. *Tract.* 8vo. vol. 437. [*Lond.* 1885.] 8vo.
- HELL, P. Die wichtigsten Klein-Kraft-Maschinen, ihre Vorzüge und ihre Mängel. *Tract.* 8vo. vol. 327. *Braunschweig*, 1880. 8vo.
- HELL GATE. Destruction of reef at Hallett's Point (Hell Gate). Report of Lieut.-Col. Newton, etc. *Tract.* 8vo. vol. 280. *Washington*, 1877. 8vo.
- HELLWAG, W. Bericht über die Ausmittlung der Bahnachse und des Längenprofils der Gotthardbahn und die Bearbeitung eines approximativen Kostenvoranschlages. *Zürich*, 1876. folio.
- Rapport sur la détermination du tracé et du profil en long du chemin de fer du Gothard avec devis approximatif. 3 pt. *Zürich*, 1876. folio.

- HELLWAG, W.—*continued*. Die Gotthardbahn. Mein Conflict mit der Verwaltung. *Basel*, 1882. 4to.
- Rapport sur les causes du surcroît des frais de construction des lignes tessinoises de plain Biascoi-Locarno et Lugano-Chiasso. [Translated from the German by E. Lauber.] *Zurich*, 1876. folio.
- HELLYER, S. S. Lectures on the science and art of Sanitary Plumbing. 2nd edition. *Lond.* 1882. 8vo.
- The Plumber and Sanitary Houses, etc. *Lond.* [1884.] 8vo.
- — 5th edition. *Lond.* 1893. 8vo.
- HELMERT, F. R. Die Uebergangscurven für Eisenbahn-Geleise. *Tract.* 8vo. vol. 279. *Aachen*, 1872. 8vo.
- HELMHOLTZ, H. Wissenschaftliche Abhandlungen. 2 Bde. *Leipzig*, 1882–83. 8vo.
- Popular Lectures on Scientific Subjects. With an introduction by Professor Tyndall. *Lond.* 1873. 8vo.
- HELPS, Sir A. A Business Man. *Tract.* 8vo. vol. 465. *New York*, 1885. 8vo.
- Life and labours of Mr. Brassey. *Lond.* 1872. 8vo.
- HELVETIUS, J. Animadversions on the first part of the Machina Cœlestis of Johannes Helvetius, consul of Dantzick; together with an explanation of some instruments made by R. Hooke. *Tract.* 8vo. vol. 33. *Lond.* 1674. 8vo.
- HEMANS, G. W. Description of the Rails, Sleepers, and Fastenings on the Dublin and Drogheda Railway. *Tract.* 8vo. vol. 82. (From Min. Proc. Inst. C.E.) *Lond.* 1846. 8vo.
- Metropolitan Board of Works. Letter . . . with reference to certain statements in Report of Mr. George Hopkins on the [Metropolitan Sewage and Essex Reclamation] Company's Scheme. *Tract.* 8vo. vol. 478. *Lond.* 1862. 8vo.
- Report on a proposed general Cattle Market for Dublin, in connexion with a junction of the metropolitan railways and the steamboat station at the North Wall. *Tract.* 8vo. vol. 124. *Dublin*, 1860. 8vo.
- HEMANS, G. W., and HASSARD, R. On the future Water-supply of London. *Tract.* 8vo. vol. 151. *Lond.* 1866. 8vo.
- HEMENWAY, F. F. Indicator Practice and Steam-Engine Economy. *New York*, 1886. 8vo.
- HEMMING, F. H. Cheap Railroads for India and the Colonies, in connection with the Traction Engine and Endless Railway. *Tract.* 8vo. vol. *Lond.* 1857. 8vo.
- HEMPEL, W. Methods of Gas Analysis. Translated from the German, etc. *Lond.* 1892. 8vo.
- HEMPTINNE, — DE, and STAS, T. S. Rapport sur une lampe de sûreté inventée par M. Éloin. *Tract.* 8vo. vol. 99. [Bruxelles, 1847.] 8vo.

(From the *Bulletins de l'Académie Royale de Belgique*.)

- HENARD, E. Étude sur une application du transport de la force par l'électricité. Projet de train continu portant plate-forme sans fin au ras du sol pour l'Exposition Universelle de 1889. *Tract. folio. vol. 42.* Paris, 1887. folio.
- HENCK, J. B. Field-book for Railroad Engineers, etc. New York, 1877. 8vo.
- HENDERSON, A. On the "descriptive measurement" of Ships and Steamers, defining their tonnage, displacement, capacity: and the bills recently brought before Parliament with reference to their safety and capabilities for mercantile transport service. *Tract. 8vo. vol. 137.* [Lond. 1854.] 8vo.
(From the Journal of the Society of Arts.)
- [Proposal for a] Test Trial and Shipping Improvement Association, etc. *Tract. folio. vol. 11.* Lond. 1865. folio.
- HENDERSON, A., and GREAVES, C. Floating docks, Calcutta. Memoir accompanying a letter addressed to the chairman, deputy-chairman and court of directors of the H.E.I.C., illustrating the necessity of forming wet docks for the port of Calcutta, their feasibility, and a general descriptive outline of the navigation of the Hooghly, and the shipping trade, as connected with railways in Bengal, with proposals for a steam ferry-bridge crossing the river at Calcutta. *Tract. 8vo. vol. 102.* Lond. 1854. 8vo.
- HENDERSON, D. M. Report of the chief Coast-lights' Engineer in reference to the sea-lighting of the entrance to the Yang-tze river. *Tract. 4to. vol. 63.* Shanghai, 1869. 4to.
- HENDERSON, J. Observations on Galley Head and Howth-Bailey Lights. *Tract. folio. vol. 42.* Sunderland, 1883. folio.
- Patent processes for purifying Cast Iron into Steel and Wrought Iron; and for foundry and other purposes. *Tract. 8vo. vol. 233.* Glasgow, 1871. 8vo.
- Patent processes for purifying Cast Iron for foundry purposes, and for converting cast iron into steel and wrought iron, with chemical analyses, etc. *Tract. 4to. vol. 73.* Lond. 1872. 4to.
- Patent processes for refining Cast Iron and for the production of Steel and Wrought Iron. *Tract. 8vo. vol. 233.* New York, 1870. 8vo.
- HENDERSON, J. B. Diagram showing number of wet days at Brisbane from 1st January, 1860, to 31st December, 1885. *Tract. folio. vol. 38.* Brisbane, [1886?] folio.
- HENDERSON, W. The elements of the Slide Rule. Madras, 1879. 8vo.
- HENFRY, A. The Micographic Dictionary, 1883. See GRIFFITH, J. W., and HENFRY, A.
- HENLEY, T. F. Memorandum on the Jordan Canal. *Tract. 8vo. vol. 350.* Lond. 1883. 8vo.
- HENLEY-ON-THAMES. The Henley-on-Thames Gas Act, 1888. Lond. 1888. folio.

- HENNEBERT, —, *Lt.-Col.* Les industries du Creusot. Le matériel de guerre. *Paris*, 1890. 8vo.
- HENNELL, T. Hydraulic and other Tables for purposes of Sewerage and Water Supply. *Lond.* 1884. 8vo.
- On the Supply of Sea Water to London. *Tract.* 8vo. vol. 306. *Lond.* 1879. 8vo.
- HENNESSY, H. Hydraulic Problems on the Cross-sections of Pipes and Channels. *Tract.* 8vo. vol. 455. *Lond.* 1888. 8vo.
(From the Proc. Royal Soc.)
- On the Maximum Discharge through a Pipe of Circular Section when the effective head is due only to the pipe's inclination. *Tract.* 8vo. vol. 482. *Lond.* 1888. 8vo.
(From the Proc. Royal Soc.)
- Problems in Mechanism regarding Trains of Pulleys and Drums of Least Weight for a given velocity ratio. *Tract.* 8vo. vol. 437. *Lond.* 1887. 8vo.
- HENNICKE, J. Bericht über Schlachthäuser und Viehmärkte in Deutschland, Frankreich, Belgien, Italien, England und der Schweiz. *Berlin*, 1866. folio.
- HENNICKE, J., and HUDE, H. v. D. Buda-Pest főváros. Közvéghídja és marha-vásárja a városi hátság megbízásából építettek 1870–72 évben. *Buda-Pest*, [1873?] folio.
- Oeffentliches Schlachthaus und Viehmarkt in Buda-Pest. *Berlin*, 1876. folio.
- HENNING, D. H. Ueber den natürlichen Asphalt, seine Anwendung und Bearbeitung bei Bauwerken. *Tract.* 4to. vol. 67. *Limmer*, 1866. 4to.
- HENRICI, O. Skeleton Structures: especially in their application to the building of steel and iron Bridges. *Lond.* 1866. 8vo.
- HENROT, H. Les procédés d'assainissement des villes. Résumé. [1891?] folio.
- HENRY, —. Mémoire sur le chemin de fer de la Loire d'Andrezieux à Roanne. 1828. See MELLET, F. S., and HENRY, —.
- HENRY, —, *Antiquary*. Catalogue des armes et armures européennes et orientales du XV^e au XVIII^e siècle . . . composant l'importante collection de M. Henry, etc. *Tract.* 8vo. vol. 405. *Paris*, 1886. 8vo.
- HENRY, J. T. The early and late history of Petroleum, with authentic facts in regard to its development in Western Pennsylvania. *Philadelphia*, 1873. 8vo.
- HENRY, JAMES. Aeneidea: or, critical, exegetical, and aesthetical remarks on the Aeneis. 2 vols. *Dublin*, 1873. 8vo.
- HENRY, JOSEPH, *Professor*. Meteorology in its connection with Agriculture. *Tract.* 8vo. vol. 135. *Washington*, 1858. 8vo.
(From the Agricultural Report of the United States Patent Office, 1856.)
- Reports of the operations of the National Academy of Sciences, Washington. *Tract.* 8vo. vol. 180. *Washington*, 1867–68. 8vo.

- HENRY, JOSEPH, *Professor—continued.* A memorial of Joseph Henry. *Washington*, 1881. 8vo.
- Sketch of the Life and Contributions to Science of Prof. Henry. *Tract.* 8vo. vol. 467. [1872?] 8vo.
- HENRY, L. *Traité . . . du laminage du fer.* 1881. See NEVEU, F., and HENRY, L.
- HENRY, W. An estimate of the philosophical character of Dr. Priestley. *Tract.* 8vo. vol. 57. *York*, 1832. 8vo.
(Read at the meeting of the British Association in 1831.)
- HENRY, W. C. Memoirs of the life and scientific researches of John Dalton. [*Cavendish Society.*] *Lond.* 1854. 8vo.
- HENSON, W. S. Specification of Patent for certain improvements in Steam-engines. *Tract.* folio. vol. 5. *Lond.* 1841. folio.
- HENTHORN, J. T. Report of a Test of the Steam Plant at the Washington Mills, Lawrence, Mass, etc. 1890. See LEAVITT, E. D., and HENTHORN, J. T.
- HENTHORN, J. T., and THURBER, C. D. The Corliss Engine and its management. Edited by E. P. Watson. 3rd edition, enlarged, etc. *New York*, 1894. 12mo.
- HENWOOD, C. F. Description of the "Affondatore," iron armour clad Turret Ship of the Royal Italian Navy. (On Pitching [two articles].) *Tract.* 8vo. vol. 292. [1875?] 8vo.
- Sir R. S. Robinson, E. J. Reed, and N. Barnaby arraigned at the bar of Public Opinion. [Concerning an adjudication on designs for turrets submitted by C. F. Henwood.] *Tract.* 8vo. vol. 241.] *Lond.* 1874. 8vo.
- Textbook to the Turret and Tripod systems of Captain Cowper P. Coles, as designed for future turret navies: from the plans of Vice-Admiral Halsted. *Tract.* 4to. vol. 55. 1867. 4to.
- HENWOOD, W. J. Address delivered at the spring meeting of the Royal Institution of Cornwall. *Tract.* 8vo. vol. 220. *Penzance*, 1869. 8vo.
- — 1871. *Tract.* 8vo. vol. 253. *Truro*, 1871. 8vo.
- The Metalliferous deposits of Cornwall and Devon; with Appendices on subterranean temperature; the electricity of rocks and veins; the quantities of water in the Cornish mines; and mining statistics. *Lond.* 1843. 8vo.
(Forming vol. 5 of the Transactions of the Royal Geological Society of Cornwall.)
- Report on Metalliferous Deposits of Kumaon, etc. 1855. See INDIA.—KUMAON.
- HEPPEL, J. M. Letter to Major-General Johnston on Indian rolling-stock. *Tract.* folio. vol. 9. *Lucknow*, 1868. folio.
- On the relation between the Velocity and the Resistance encountered by bodies moving in Fluids. *Tract.* 8vo. vol. 498.
(From Min. Proc. Inst. C.E.) *Lond.* 1846. 8vo.
- On the theory of Continuous Beams. *Tract.* 8vo. vol. 209.
(From the Proc. of the Royal Soc.) [*Lond.*] 1870. 8vo.

- HEPPEL, J. M.—*continued*. Specification of an improved Rotary Pump and Engine. *Tract. 4to. vol. 41.* *Lond.* 1855. 4to.
- HERBART, J. F. De attentionis mensura causisque primariis : psychologiæ principia statica et mechanica exemplo illustraturus scripsit J. F. Herbart. *Tract. 8vo. vol. 33.* *Regiomonti*, 1822. 8vo.
- HERBERTSHIRE COLLIERY, *Denny*. Report on the Herbertshire Colliery Explosion, Denny [on June 30, 1893]. *Lond.* 1893. folio.
- HERBINUS, J. Dissertationes de admirandis mundi cataractis supra et subterraneis, etc. *Amstelodami*, 1678. 4to.
- HERDER, S. A. W. von, *Baron*. Die Anwendung der erwärmten Gebläseluft im Gebiete der Metallurgie. . . Aus den Nachlasschriften des . . . Freihern von Herder. Herausgegeben von F. T. Merbach. (Atlas of plates.) *Leipzig*, 1840. 8vo. and folio.
- HEREFORD AND GLOUCESTER CANAL. Act for making a navigable Canal from Hereford to Gloucester, with a collateral cut to the town of Newent. *Lond.* 1791. folio.
- Act to vary and extend the line of the Canal authorized by the Act [of 1791]. *Lond.* 1793. folio.
- HERING, C. Practical direction for winding Magnets for Dynamos. *New York*, 1887. 8vo.
- Principles of Dynamo-Electric Machines and practical directions for designing and constructing Dynamos, etc. *New York*, 1888. 8vo.
- Recent Progress in Electric Railways, etc. *New York*, 1892. 8vo.
- HERING, R. Bearing-Piles : formulæ for their sustaining power. *Tract. 8vo. vol. 314.* [1878.] 8vo.
- Brick Arches for large Sewers. *Tract. 8vo. vol. 438.* [New York,] 1878. 8vo.
- Disposal of Sewage. [New York, 1890.] 8vo.
- The Flow of Water in small channels. *Tract. 8vo. vol. 438.* [New York,] 1878. 8vo.
- The future Sewerage requirements of the City of Philadelphia. *Tract. 8vo. vol. 438.* Philadelphia, 1880. 8vo.
- House and Street Drainage of the City of Philadelphia. Philadelphia, 1878. 8vo.
- Notes on the Pollutions of Streams. *Tract. 8vo. vol. 471.* Concord, N.H., 1888. 8vo.
- Report of the results of an examination made in 1880 of several Sewerage Works in Europe. *Tract. 4to. vol. 92.* Washington, 1881. 4to.
- Report of the Water Supply of the City of Tacoma, etc. Tacoma, 1892. 8vo.

- HERING, R.—*continued*. Report on a proposed system of Sewer for St. John's, Newfoundland: accompanied by Report on same by C. J. Harvey, *etc.* *Tract. 8vo. vol. 483.* *New York, 1889.*
- Report on a system of Main Sewerage for the City of Cleveland. *Tract. 8vo. vol. 351.* *Cleveland, 1882.*
- Report on a system of Sewerage for the City of Binghampton, N.Y. *Tract. 8vo. vol. 351.* *Binghampton, 1882.*
- Report on a system of Sewerage for the City of Wilmington, Delaware. *Tract. 8vo. vol. 351.* *Wilmington, 1883.*
- Report on an additional Water Supply for Waterbury, Conn. *New York, 1892.*
- Report on European Sewerage Systems, with special reference to the needs of the City of Philadelphia. Final résumé and conclusions. *Tract. 8vo. vol. 351.* *Philadelphia, 1881.*
- Report on European Sewerage Works. *Washington, 1881.*
- Report on Sewerage Works for the City of Waterbury, Conn. *Tract. 8vo. vol. 351.* *Philadelphia, 1882.*
- Report upon a Sewerage System for the City of Sioux Falls. *[Sioux Falls,] 1893.*
- Report upon a system of Sewerage for the City of Ironton, Conn. *[New York, 1891.]*
- Report upon a system of Sewerage for the City of Superior. *[Annual Report of the Board of Public Works.]* *Superior, 1893.*
- Reports on the Sewerage and Water Supply for Atlanta, Georgia. *Atlanta, 1891.*
- Sewerage Systems. *Tract. 8vo. vol. 438.* *[New York,] 1881.*
- HERING, R., and GRAY, S. M. Report on the extension of Water Supply and on the disposal of the Sewage of the City of Toronto. *Tract. 8vo. vol. 482.* *New York, 1889.*
- HERING, R., and OTHERS. Report upon the Sewerage of the District of Columbia. *Washington, 1890.*
- HERIOT-WATT COLLEGE, *Edinburgh.* Calendar, 1889–90 (1891, *etc.*). *Edinburgh, 1889, etc.*
- HERIZ, E. Ferrocarriles de 75 centímetros. *San Felieu de Guixols, 1889.*
- HERMAN, H. Sammlung der seit dem Reichs-Deputations-Hauptschluss vom 25 Februar, 1803, in Bezug auf Rhein-Handel-Schiffahrt erschienenen Gesetze, *etc.* *Mainz, 1820.*
- HERODSFOT GUNPOWDER FACTORY, *Liskeard.* Explosives at the . . . Factory. Report by Maj. Majendie, R.A. *Lond. 1877.*
- HERR, —. Die generellen Vorarbeiten für den Oder-Lateral-Canal und den Weichsel-Oder-Canal, *etc.* *Breslau, 1880.*

- HERRING, R. Paper and Paper Making, ancient and modern.
Lond. 1855. 8vo.
- HERRING, W. R. The Construction of Gas Works, *etc.*
Lond. 1892. 8vo.
- — 2nd edition. *Lond.* 1893. 8vo.
- HERRMANN, G. Die graphische Untersuchung der Centrifugal-regulatoren. *Tract.* 8vo. vol. 492. *Berlin*, 1886. 8vo.
- Mechanics of Hoisting Machinery. 1893. See WEISBACH, J., and HERRMANN, G.
- Der Reibungswinkel. *Tract.* 4to. vol. 91.
Braunschweig, 1882. 4to.
- HERSCHEL, CAROLINA. Catalogue of stars taken from Mr. Flamsteed's Observations, contained in the second volume of the "Historia Cœlestis" and not inserted in the British Catalogue. With introductory and explanatory remarks by W. Herschel, *etc.*
Lond. 1798. folio.
- HERSCHEL, CLEMENS. Continuous Revolving Drawbridges: the principles of their construction and the calculation of the strains in them. *Boston, Mass.* 1875. 8vo.
- On the best manner of making use of the services of Experts in the conduct of Judicial Inquiries. *Tract.* 8vo. vol. 426.
Boston, 1886. 8vo.
- On the River and Harbor Bills of the United States Congress. *Tract.* 8vo. vol. 376. 1885. 8vo.
- Report on the Prevention of Floods. 1886. See FRANCIS, JAMES B., CLARKE, E. C., and HERSCHEL, C.
- Testing Flume of the Holyoke Water Power Company. *Tract.* 4to. vol. 91. *Holyoke, Mass.* 1882. 4to.
- The Venturi Water Meter. *Tract.* 8vo. vol. 469.
[*New York*,] 1888. 8vo.
- (From the Trans. Amer. Society C.E.)
- The Venturi [Water] Meter. *Providence, R.I.*, 1893. 8vo.
- The Works of the East Jersey Water Company for the supply of Newark, N.J. *Tract.* 8vo. vol. 506. *Boston*, 1893. 8vo.
- HERSCHEL, Sir J. F. W. Account of a series of Observations, made in the summer of the year 1825, for the purpose of determining the difference of the Meridians of . . . Greenwich and Paris. *Tract.* 4to. vol. 43. *Lond.* 1826. 4to.
- (From Phil. Trans.)
- Account of observations made with a twenty-feet reflecting telescope; comprising descriptions and approximate places of 321 new double and triple stars; observations on the second comet of 1825; an account of the actual state of the great nebula in Orion, compared with those of former astronomers; observations of the nebula in the girdle of Andromeda. *Tract.* 4to. vol. 15.
(From the Memoirs of the R. Astr. Soc.) *Lond.* 1826. 4to.

- HERSCHEL, Sir J. F. W.—*continued*. Account of observations made with a twenty-feet reflecting telescope, containing a second catalogue of 295 new double and triple stars (reduced to the beginning of 1830); together with some observations of double stars previously known. *Tract. 4to. vol. 44. Lond. 1827. 4to.*
(From the Memoirs of the R. Astr. Soc.)
- Third series of observations with a twenty-feet reflector, containing a catalogue of 384 new double stars (reduced to the beginning of 1828); together with some observations of stars previously known. *Tract. 4to. vol. 44. Lond. 1828. 4to.*
(From the Memoirs of the R. Astr. Soc.)
- Fourth series of observations with a twenty-feet reflector; containing the places, descriptions, and measures of 1236 double stars (reduced to the beginning of 1830), the greater part of them not previously described. *Tract. 4to. vol. 44. Lond. 1830. 4to.*
(From the Memoirs of the R. Astr. Soc.)
- Fifth (Sixth) catalogue of double stars observed at Slough in the years 1830 and 1831 with the twenty-feet reflector; containing the places, descriptions, and measured angles of position of 2007 of those objects, of which 1304 have not been found described in any previous collection; the whole reduced to the epoch 1830.0. *Tract. 4to. vol. 44. Lond. 1832. 4to.*
(From the Memoirs of the R. Astr. Soc.)
- Account of Arago's Experiments on Magnetism, etc. 1825. See BARBAQUE, C., and HERSCHEL, Sir J. F. W.
- An Address delivered at a . . . meeting of the Astronomical Society . . . on presenting the honorary medals to F. Baily, Esq., Lieut. W. S. Stratford, R.N., and Col. M. Beaufoy. *Tract. 4to. vol. 44. Lond. 1827. 4to.*
(From the Memoirs of the R. Astr. Soc.)
- An Address delivered at the anniversary meeting of the Astronomical Society . . . on presenting the honorary medals to Rev. W. Pearson, Professor Bessel, and Professor Schumacher. *Tract. 8vo. vol. 130. Lond. 1829. 8vo.*
- Address on presenting the honorary medal of the Royal Astronomical Society to W. Lassell, of Liverpool. *Tract. 8vo. vol. 130. Lond. 1849. 8vo.*
- An Address on the occasion of the delivery of the honorary medals of the Astronomical Society . . . to Lieut.-Gen. Sir T. M. Brisbane, and J. Dunlop. *Tract. 8vo. vol. 130. Lond. 1828. 8vo.*
- Address on the presentation of the gold medal of the Royal Astronomical Society to Professor Bessel, for his observations and researches on the parallax of 61 Cygni. *Tract. 8vo. vol. 130. Lond. 1841. 8vo.*
- 'Appendix No. I. On a case of superficial colour presented by a homogeneous liquid internally colourless. *Tract. 4to. vol. 43. Lond. 1845. 4to.*
(From the Phil. Trans.)
- 'Appendix No. II. On the epiploic Dispersion of Light, being a supplement to a paper entitled, "On a case of superficial colour presented by a homogeneous liquid internally colourless." *Tract. 4to. vol. 43. Lond. 1845. 4to.*

- HERSCHEL, Sir J. F. W.—*continued*. Answers to Scientific Questions. *Tract. 4to. vol. 43.* 1860. 4to.
- Approximate places of 321 new double and triple stars, for January 1, 1825, with their estimated angles of position, distances, magnitudes, and other particulars. *Tract. 4to. vol. 44.*
(From the Memoirs of the R. Astr. Soc.) [Lond. 1825.] 4to.
- Answers to the Questions communicated by Lord Overstone to the Decimal Coinage Commissioners. *Tract. 8vo. vol. 471.*
Lond. 1857. 8vo.
- Description of a machine for resolving by inspection certain important forms of Transcendental Equations. *Tract. 4to. vol. 43.*
(From the Trans. Camb. Phil. Soc. for 1832.) Lond. 1832. 4to.
- An Essay entitled, the Yard, the Pendulum, and the Meter, considered in reference to the choice of a standard of length. *Tract. 8vo. vol. 139.*
Lond. 1863. 8vo.
- Familiar Lectures on Scientific Subjects. Lond. 1867. 8vo.
- Instantaneous Photography. *Tract. 4to. vol. 43.* 1860. 4to.
- Instructions for making and registering Meteorological Observations in Southern Africa. *Tract. 8vo. vol. 335.*
Lond. [] 8vo.
- A list of Test Objects, principally double Stars, arranged in classes, for the trial of Telescopes, etc. *Tract. 4to. vol. 44.*
(From the Memoirs of the R. Astr. Soc.) Lond. 1834. 4to.
- Manual of Meteorology. *Tract. 8vo. vol. 130.* Lond. 1859. 8vo.
(From the Admiralty Manual of Scientific Inquiry.)
- A Manual of Scientific Enquiry; prepared for the use of Her Majesty's navy, etc. Lond. 1849. 8vo.
- Memoir of F. Baily, late President of the Royal Astronomical Society. *Tract. 4to. vol. 44.* Lond. 1844. 4to.
(From the Memoirs of the R. Astr. Soc.)
- Micrometrical Measures of 364 Double Stars with a seven-feet equatorial achromatic telescope, taken at Slough, in the years 1828, 1829, and 1830. *Tract. 4to. vol. 44.* Lond. 1831. 4to.
(From the Memoirs of the R. Astr. Soc.)
- On the investigation of the Orbits of revolving double Stars; being a supplement to a paper entitled "Micrometrical measures of 364 double stars," etc. *Tract. 4to. vol. 44.* Lond. 1832. 4to.
(From the Memoirs of the R. Astr. Soc.)
- A second series of Micrometrical Measures of Double Stars. *Tract. 4to. vol. 44.* Lond. 1834. 4to.
(From the Memoirs of the R. Astr. Soc.)
- Notice of a remarkable deposition of Ice round the decaying stems of Vegetables during Frost. *Tract. 8vo. vol. 130.*
(From the Philosophical Magazine.) Lond. 1833. 8vo.
- Notice of a remarkable occurrence of Serpentine at the junction of sienite with the dolomite of the Tyrol. *Tract. 8vo. vol. 130.*
[1835?] 8vo.

- HERSCHEL, Sir J. F. W.—*continued*. Notice of the Elliptic Orbits of ξ Bootis and η Coronæ; with a second approximation to orbit of γ Virginis. *Tract. 4to. vol. 44.* Lond. 1833.
(From the Memoirs of the R. Astr. Soc.)
- Observation of Biela's comet. *Tract. 4to. vol. 44.*
(From the Memoirs of the R. Astr. Soc.) Lond. 1832.
- Observations on Mr. Fraunhofer's Memoir on the inferiority of Reflecting Telescopes when compared with Refractors. *Tract. vol. 130.* Slough, 1825.
- Observations of Nebulæ and clusters of stars, made at Slough with a twenty-feet reflector, between the years 1825 and 1833. *Tract. 4to. vol. 43.* Lond. 1833.
(From the Phil. Trans. for 1825.)
- Observations of the Comet of Halley, after the perihelion passage in 1836: made at Feldhausen, Cape of Good Hope. *Tract. vol. 44.* (From the Memoirs of the R. Astr. Soc.) Lond. 1837.
- On a new method of computing the Occultations of the Fixed Stars. *Tract. 4to. vol. 44.* Lond. 1824.
(From the Memoirs of the R. Astr. Soc.)
- On certain improvements on Photographic processes described in a former communication, and on the parathermic rays of the solar spectrum. *Tract. 4to. vol. 43.* Lond. 1843.
(From Phil. Trans. for 1843.)
- On the Absorption of Light by coloured media, viewed in connexion with the undulatory theory. *Tract. 8vo. vol. 130.* (From the Philosophical Magazine.) Lond. 1833.
- On the action of the Rays of the Solar Spectrum on the Daguer type plate. *Tract. 8vo. vol. 130.* Lond. 1843.
(From the Philosophical Magazine.)
- On the action of the Rays of the Solar Spectrum on Vegetables, Colours, and on some new photographic processes. *Tract. vol. 43.* (From Phil. Trans.) Lond. 1842.
- On the action of the Solar Spectrum upon certain compound Silver. *Tract. 4to. vol. 43.* 1859.
- On the advantages to be attained by a revision and re-arrangement of the Constellations, with especial reference to those of the southern hemisphere, and on the principles upon which such a re-arrangement ought to be conducted. *Tract. 4to. vol. 44.* (From the Memoirs of the R. Astr. Soc.) Lond. 1841.
- On the algebraic Expression of the number of Partitions of which a given Number is susceptible. *Tract. 4to. vol. 43.* (From Phil. Trans. for 1850.) Lond. 1850.
- On the Astronomical Causes which may influence Geological Phenomena. *Tract. 4to. vol. 43.* Lond. 1832.
(From the Trans. of the Geographical Society.)
- On the chemical action of the Rays of the Solar Spectrum on preparations of silver and other substances, both metallic and non-metallic, and on some photographic processes. *Tract. vol. 43.* (From the Phil. Trans.) Lond. 1840.

- HERSCHEL, Sir J. F. W.—*continued*. On the Determination of the most probable Orbit of a Binary Star. *Tract. 4to. vol. 44.*
 (From the Memoirs of the R. Astr. Soc.) *Lond. 1849. 4to.*
- On the Formulæ investigated by Dr. Brinkley for the general term in the development of Lagrange's expression for the Summation of Series and for successive integrations. *Tract. 4to. vol. 43.*
 (From Phil. Trans.) *Lond. 1860. 4to.*
- On the Parallax of the fixed Stars. *Tract. 4to. vol. 43.*
 (From Phil. Trans.) *Lond. 1826. 4to.*
- Correction of an error in a paper published in the Philosophical Transactions, entitled, "On the Parallax of the fixed stars." *Tract. 4to. vol. 43.* *Lond. 1827. 4to.*
 (From the Phil. Trans. for 1827.)
- On the Satellites of Uranus. *Tract. 4to. vol. 44.*
 (From the Memoirs of the R. Astr. Soc.) *Lond. 1834. 4to.*
- On the Separation of Iron from other metals. *Tract. 4to. vol. 43.*
 (From Phil. Trans.) *Lond. 1821. 4to.*
- On the variability and periodical nature of the Star α Orionis. *Tract. 4to. vol. 44.* *Lond. 1841. 4to.*
 (From the Memoirs of the R. Astr. Soc.)
- Outlines of Astronomy. 11th edition. *Lond. 1871. 8vo.*
- A preliminary Discourse on the Study of Natural Philosophy. [*Lardner's Cabinet Cyclopædia.*] *Lond. 1830. 8vo.*
- Physical Astronomy. Sound, Light. *Cambridge, [1849?] 4to.*
 (From the Encyclopædia Metropolitana.)
- Remarks on Colour-Blindness. *Tract. 8vo. vol. 130.*
 (From the Proceedings of the Royal Society.) *Lond. 1859. 8vo.*
- Report of a joint committee of Physics and Meteorology on Magnetic Observatories, etc. [Sir J. F. W. Herschel, Chairman.] *Tract. 8vo. vol. 135.* [1855?] *8vo.*
- Sur la séparation de l'oxide de fer, et sur un nouveau procédé pour effectuer la purification complète de l'oxide d'urane. *Tract. 8vo. vol. 130.* [1832.] *8vo.*
- Swing Cot for sea voyages. *Tract. 4to. vol. 43.*
 (From the Journ. Soc. Arts.) [*Lond. 1861.*] *8vo.*
- "Telescope." [An article reprinted from the Encyclopædia Britannica.] *Tract. 4to. vol. 43.* *Lond. [1860?] 4to.*
- A Treatise on Astronomy. [*Lardner's Cabinet Cyclopædia.*] *Lond. 1833. 8vo.*
- — New edition. [*Lond. 1840?*] *8vo.*
- Uniform Musical Pitch. *Tract. 4to. vol. 43.* *1859. 4to.*
- Sir J. Herschel: an éloge. Read at the . . . meeting of the Royal Astronomical Society . . . 1872. *Tract. 8vo. vol. 219.* [1872.] *8vo.*
- [For reports of Committees of the British Association, drawn up by Sir J. F. W. Herschel:] See BRITISH ASSOCIATION.

- HERSENT, H. Channel Bridge. Preliminary designs. 1889.
Pont sur la Manche. Avant-projets. 1889. *See* SCHNEIDER and Co., and HERSENT, H.
- Communication sur le canal de Panama. *Tract.* 8vo. vol. 471.
Paris, 1882. 8vo.
- Port du Havre. Étude pour les nouvelles installations maritimes et l'achèvement des digues de la Seine. *Paris*, 1884. 4to.
- Travaux publics. Ouvrages exécutés au moyen de l'air comprimé, dragages, dérochements, terrassements, outillage. Descriptions des moyens d'exécution. *Paris*, 1889. 4to.
- HERSEY, T. Gas Lighting v. Electric Lighting. 1878. *See* KIRKHAM, T. N., and HERSEY, T.
- HERTSLET, L. C. Sewers of Westminster and part of Middlesex. Regulations in regard to the construction of sewers. *Tract.* folio. vol. 13.
Lond. 1846. folio.
- HERTWIG, R. Gedächtnissrede auf C. T. v. Siebold. *Tract.* 4to. vol. 113.
München, 1886. 4to.
- HERTZBERG, W. Paper Testing: being a description of paper testing as carried out in the German Government Laboratory at Charlottenburg. Translated by P. N. Evans. *Lond.* 1892. 8vo.
- HERWARTH, T. DE. Description d'un moyen pour la conservation des poteaux télégraphiques. *Tract.* 8vo. vol. 308.
St. Pétersbourg, 1878. 8vo.
- HERZ, H. Electric Waves: being researches on the propagation of electric action with finite velocity through space. Authorised English translation by D. E. Jones: with a preface by Lord Kelvin. *Lond.* 1893. 8vo.
- HERZBERG, R. The Sewing Machine: its history, construction, and application. Translated from the German, etc.
Lond. 1864. 8vo.
- HERZOG, FERR-. *See* FERR-HERZOG.
- HESKETH, R. Shall the new Street which is to form the grand communication between the eastern and western parts of the Metropolis be straight or crooked? *Tract.* 8vo. vol. 117.
Lond. 1854. 8vo.
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Lond. 1807. 8vo.
- HESS, A. Die Correction der Wildbäche. *Tract.* 4to. vol. 78.
Halle, 1876. 4to.
- HESS, P., and WACHTEN, P. F. Der gegenwärtige Stand der militärischen Luftschiffahrt. *Tract.* 8vo. vol. 446.
Vienna, 1887. 8vo.
- HESTON AND ISLEWORTH LOCAL BOARD. By-laws and Regulations . . . for House Connections with Sewers and Drainage of houses, etc.
1890. 8vo.

- HESZ, A. Die Bedeutung des Rostock-Berliner Schiffahrts-Kanals für die landwirthschaftlichen Interessen in der Provinz Brandenburg (Mecklenburg), *etc.* 2 pts. Rostock, 1877. 8vo.
- HETT, C. L. Rural Water Supply. *Tract.* 8vo. vol. 456. Lond. 1888. 8vo.
- A Table of the power of Leather Belting and Shafts. *Tract.* 8vo. vol. 484. Lond. 1889. 8vo.
- The Turbine Manual and Millwright's Handbook, *etc.* Lond. 1892. 8vo.
- Turbines of various types constructed at the Foundry, Brigg, *etc.* *Tract.* 8vo. vol. 446. Hull, 1887. 8vo.
- HEURTIER, F. Rapport à son excellence le Ministre de l'Agriculture . . . fait au nom de la Commission chargée d'étudier les différentes questions qui se rattachent à l'émigration européenne. Paris, 1854. 8vo.
- HEUSCHLING, X. Essai sur la statistique générale de la Belgique, *etc.* Bruxelles, 1841. 8vo.
- HEWES, F. W., and GANNETT, H. Scribner's Statistical Atlas of the United States. New York, [1885 ?] folio.
- HEWETT, W., *Commander.* A Survey of the Entrance to the River Humber made by order of the Lords Commissioners of the Admiralty 1828, corrected to 1841. [A chart.] Lond. 1841. folio.
- HEWITT, W. Specification of improvements in Propelling Vessels. *Tract.* 4to. vol. 41. Lond. 1855. 4to.
- HEWSON, M. B., *General.* The Canadian Pacific Railway. *Tract.* 8vo. vol. 302. Toronto, 1880. 8vo.
- The Grand Trunk Railway of Canada. *Tract.* 8vo. vol. 302. Toronto, 1876. 8vo.
- Notes on the Canadian Pacific Railway. *Tract.* 8vo. vol. 302. Toronto, 1879. 8vo.
- HEWSON, T. Corporation of Leeds. Report on the Destructors and Carbonizer of house, ashpit, and market Refuse. *Tract.* 8vo. vol. 456. Leeds, 1884. 8vo.
- Description of the Leeds Sewage Works. *Tract.* 8vo. vol. 372. Leeds, 1884. 8vo.
- HEWSON, W. Principles and practice of Embanking Lands from river-floods, as applied to "levees" of the Mississippi. New York, 1860. 8vo.
- HEYFELDER, O. Transkaspien und seine Eisenbahn. Hannover, 1888. 8vo.
- HEYNE, W. Des travaux de terrassement relatifs aux chemins de fer et aux routes. Paris, 1878. 8vo.
- HEYWOOD, *Lancs.* An Act for the better supplying with Water the town or village of Heywood. Lond. 1846. folio.

- HEYWOOD, J. M., *Lieut., R.E.* Report on certain experiments conducted on the river Meuse, to exhibit the advantages of the system of steam cable towing, introduced by M. O. de Mesnil and M. Eyth. *Tract. folio. vol. 9.* 1869. folio.
- River Dams or Weirs in France. *Tract. 8vo. vol. 261.* [1871?] 8vo.
- The Transporting Power of Water. *Calcutta, 1869.* folio.
- HIBBARD, J. Thoughts (submitted to censure) on the great utility of a circular and other inland Canal Navigation, in Britain. Likewise, on the discontented petitions for removing His Majesty's ministers; and on the national debt. Also, on the improvement attending the growth of wheat, use of oats, *etc.* *Tract. 8vo. vol. 95.* Lond. 1793. 8vo.
- HIBBERD, S. Water for nothing. Every house its own water supply. *Tract. 8vo. vol. 306.* Lond. 1879. 8vo.
- HICHBORN, P. Report on European Dock-yards. *Washington, 1886.* 8vo.
- HICK, B., *Jun.* Description of improved Governor for Steam-engines, *etc.* *Tract. 8vo. vol. 62.* Manchester, 1841. 8vo.
- HICK, J. Catalogue of the principal paintings, drawings, books, bronzes, *etc.*, at Mytton Hall, the residence of John Hick, Esq. (Privately printed). *Lond. 1893.* folio.
- Experiments on the Friction of the Leather Collars in Hydraulic Presses. *Tract. 8vo. vol. 209.* Lond. 1867. 8vo.
- Heavy rifled Ordnance. Speech in the House of Commons. *Tract. 8vo. vol. 229.* Bolton, 1873. 8vo.
- HICKENLOOPER, A. Address as President of the American Gas Light Association, *etc.* *Tract. 8vo. vol. 476.* 1882. 8vo.
- HICKS, W. E. Leading Events in the history of the Port of Bristol. See REID, W. N., and HICKS, W. E.
- HIGGINS, T. W. E. Sloane Square Underground Convenience. (Plans and Sections.) *Lond. 1889.* folio.
- See CHELSEA. Vestry Surveyor's Report on overhead wires . . . By T. W. Higgins. 1891.
- HIGGIN, E. A sketch of the history of ancient Door Fastenings; or, a monograph on Bars, Bolts, Locks, and Keys. Illustrated, *etc.* *Tract. 8vo. vol. 88.* [Liverpool, 1850.] 8vo.
(Printed for private circulation.)
- HIGGIN, G. Commercial and Industrial Spain. *Lond. 1886.* 8vo.
- Spain in 1866. *Tract. 8vo. vol. 165.* Edinburgh, 1866. 8vo.
- HIGGINS, B. Experiments and observations on Calcareous Cements and of preparing quicklime, *etc.* *Lond. 1780.* 8vo.
- Experiments and Observations relating to acetous acid, fixable air, dense inflammable air, oils, and fuel; the matter of fire and light, metallic reduction, combustion, and other subjects of chemical philosophy. *Lond. 1786.* 8vo.

- HIGGINS, B.—*continued*. Minutes of the Society for Philosophical Experiments and Conversations, instituted in London, January 25, 1794. (Incomplete,) Lond. 1795. 8vo.
- HIGGINS, C. Digest of Patent Cases. (Appendix.) Lond. 1875. 8vo.
- A Treatise on the Law relating to the Pollution and Obstruction of Water-Courses, etc. Lond. 1877. 8vo.
- HIGGINS, C., and EDWARDS, E. W. W. The Electric Lighting Act, 1882, the acts incorporated therewith, and the Board of Trade rules, together with numerous notes and cases. Lond. 1883. 8vo.
- HIGGINS, G. The strength of Iron Hooks, etc. *Tract. folio. vol. 45.* [Melbourne,] 1889. folio.
- HIGGINS, W. M. An introductory treatise on the nature and properties of Light, and on Optical Instruments. Lond. 1829. 8vo.
- HIGGS, P. The Electric Light in its practical application. Lond. 1879. 8vo.
- Electric Transmission of Power. Lond. 1879. 8vo.
- HIGGS, W. P. Algebra self-taught. Lond. 1876. 8vo.
- HIGH SCHOOL FOR MATHEMATICS AND ENGINEERING, Charles Street, Regent Street. Preliminary prospectus. *Tract. 8vo. vol. 68.* Lond. 1841. 8vo.
- HIGHLAND RAILWAY. Return with regard to the running of "Mixed" Trains. Lond. 1891. folio.
- [Series of photographs, illustrating the Bridges and Viaducts.] Inverness, 1864. folio.
- HIGHTON, E. The Electric Telegraph; its history and progress. Lond. 1852. 8vo.
- History of the Invention of the Electric Telegraph. 1853. See TURNBULL, L., and HIGHTON, E.
- HIGSON, J. Explosions in Coal Mines. Manchester, [1878?] 8vo.
- HILDEBRANDT, A. On Coroner's Juries. *Tract. 8vo. vol. 272.* Salford, 1876. 8vo.
- HILDENBRAND, W. Cable-making for Suspension Bridges, with special reference to the cables of the East River Bridge. New York, 1877. 8vo.
- The Underground Haulage of Coal by Wire Ropes. *Tract. 8vo. vol. 354.* Trenton, N.J., 1884. 8vo.
- HILDRED, J. Proposed scheme of Sewerage and disposal of the sewage of the borough of Batley. *Tract. 8vo. vol. 247.* Batley, 1874. 8vo.
- HILF, M. Der eiserne Oberbau, System Hilf, für Eisenbahn-Geleise. Wiesbaden, 1876. 8vo.

- HILF, M.—*continued*. Hilf's wrought-iron longitudinal continuous Sleepers for a Railway Track. *Tract*. 4to. vol. 80. Liège, 1877. 8vo.
- HILGARD, E. W. General Discussion of the Cotton Production of the United States, embracing the Cottonseed-oil industry, methods and utility of soil investigation, and tables of cotton fibre measurements. [*U.S.A. 10th Census*, Vols. 5 & 6.] Washington, 1884. 4to.
- The Phylloxera at Berkeley. Sacramento, 1885. 8vo.
- Report on the Cotton Production of the State of Louisiana : with a discussion of the general agricultural features of the State. [*U.S.A. 10th Census*, Vols. 5 & 6.] Washington, 1884. 4to.
- Report on the Cotton Production of the State of Mississippi : with a discussion of the general agricultural features of the State. [*U.S.A. 10th Census*, Vols. 5 & 6.] Washington, 1884. 4to.
- Report on the Physical and Agricultural Features of the State of California : with a Discussion of the present and future of Cotton Production in the State ; also remarks on Cotton Culture in New Mexico, Utah, Arizona, and Mexico. [*U.S.A. 10th Census*, Vols. 5 & 6.] Washington, 1884. 4to.
- Report on the Relations of Soil to Climate. [*U.S. Dep. of Agriculture*, Weather Bulletin 3.] Washington, 1892. 8vo.
- HILL, H. A. The movement of the Farmers of the Western States against Railway and other Monopolies. *Tract*. 8vo. vol. 254. Lond. 1874. 8vo.
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- HILL, J. W. Illustrated Guide to modern Agricultural Implements, Tools, Machinery, etc. Lond. 1880. 4to.
- HILL, L. M. The collection and disposal of City Refuse. *Tract*. 8vo. vol. 372. Georgetown, 1883. 8vo.
- Water Supply in British Guiana and West Indies. *Tract*. 8vo. vol. 456. Demerara, 1888. 8vo.
- HILL, M. D. Opinions of M. Crémieux, M. Bonneville de Marsangy, of Lord Campbell, and of Lord Brougham, on Lord Brougham's application in the year 1848 for French letters of naturalisation ; laid before the Association for the Promotion of Social Science, to which is added the answer of that body. *Tract*. 8vo. vol. 178. Bristol, 1869. 8vo.
- HILL, Sir R. Requisites to the completion of his plan of Post-Office Improvement. No. 1. *Tract*. 8vo. vol. 63. Lond. 1843. 8vo.
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- HILL, Sir R.—*continued*. Royal Commission on Railways. Report. *Tract. folio. vol. 12.* Lond. 1867. folio.
- The state and prospects of Penny Postage, *etc.* *Tract. 8vo. vol. 63.* Lond. 1844. 8vo.
- HILL, R. T. The Present Condition of Knowledge of the Geology of Texas. [*U.S. Geol. Survey. Bulletin No. 45.*] Washington, 1887. 8vo.
- HILL, T. A treatise upon the utility of a Railway from Leeds to Selby and Hull, with observations and estimates upon Railways generally. (Supplement.) *Tract. 8vo. vol. 228.* Leeds, 1827, 29. 8vo.
- HILL, W. An essay on the theory and practice of setting out Railway Curves. *Tract. 8vo. vol. 82.* Lond. 1847. 8vo.
- Lectures on Machinery and Appliances used in Engineering Works, delivered at the School of Military Engineering, Chatham. Chatham, 1886. folio.
- HILL, W. N. Notes on certain Explosive Agents. *Tract. 8vo. vol. 271.* Boston, 1875. 8vo.
- HILL END, N.S.W. Geological Map of Hill End and Tambaroora. 1879. folio.
- HILLAIRET, A. Transmission électrique du travail mécanique. *Tract. 8vo. vol. 429.* Paris, 1884. 8vo.
- HILLE, F. Rational Treatment of Sewage. *Tract. 8vo. vol. 490.* Lond. 1889. 8vo.
- Remarks on the Sewage Question, *etc.* *Tract. 8vo. vol. 275.* Lond. 1877. 8vo.
- Further remarks on the Sewage question, and F. Hille's system for the disposal of Sewage, *etc.* *Tract. 8vo. vol. 297.* Chiswick, 1878. 8vo.
- Sewage Disinfecting and Filtration Process. Second edition, *etc.* *Tract. 8vo. vol. 259.* Lond. 1876. 8vo.
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- HILLS, G. H. Liverpool Bay Survey. Marine surveyor's report. 1866–74. Liverpool, 1867–75. 4to.
- Report and memoir of the survey of the River Mersey, made during the years 1860–61. (1871.) Liverpool, 1862, 73. 4to.
- HINCKLEY. The Hinckley Local Board Water Act, 1888. Lond. 1888. folio.
- HIND, J. The Elements of Algebra. 5th edition. Cambridge, 1841. 8vo.
- HIND, J. R. Natural versed Sines from 0° to 125° , and logarithmic versed Sines from 0° to 135° or 0^h to 9^h , used in computing lunar distances for the Nautical Almanac. Lond. 1856. folio.

- HIND, J. R.—*continued*. On the expected return of the Great Comet of 1264 and 1556, with a history of former appearances, *etc*. *Tract. 8vo. vol. 190.* *Lond. 1848. 8vo.*
- Path of the total phase of the Solar Eclipse, December 21, 22, 1870. *Tract. 8vo. vol.* *Lond. 1870. 8vo.*
- HINKS' CHEMICAL WORKS, *Smallheath*. Report on an Explosion of Fulminate of Mercury : by Major Ford. *Lond. 1876. folio.*
- HINNELL, H. L. Sewage Treatment ; or, the purification of water-carried sewage. *Tract. 8vo. vol. 520.* *Bolton, 1891. 8vo.*
- HINTON, R. J. Irrigation in the Arid West. *Tract. folio. vol. 43.* *New York, 1888. 8vo.*
- HIORT, J. W. A practical treatise on the construction of Chimneys, . . . with an accurate description of the newly-invented tunnel, *etc*. *Lond. 1826. 8vo.*
- HIPP, —. Electric Safety distance Signal for Railways. *Tract. 4to. vol. 45.* [1862 ?] *4to.*
- HIRN, C. F. Notice sur la transmission télodynamique. 2^e édition. *Tract. 8vo. vol. 268.* *Mulhouse, 1867. 8vo.*
- HIRN, G. A. Actinomètre totaliseur absolu. *Tract. 4to. vol. 93.* *Paris, 1884. 4to.*
- Biographie de O. Hallauer, *etc*. *Tract. 4to. vol. 111.* *Mulhouse, 1884. 4to.*
- La conservation de l'énergie solaire. *Tract. 4to. vol. 91.* *Paris, 1883. 4to.*
- Exposé d'un moyen de déterminer la température des parties du soleil. *Tract. 4to. vol. 93.* *Paris, 1885. 4to.*
- Exposition analytique et expérimentale de la théorie mécanique de la chaleur : contenant la traduction du livre de G. Zeuner— "Grundzüge der mechanischen Wärmetheorie." *Paris, 1862. 8vo.*
- — 3^{me} édition, entièrement refondu. 2 vols. *Paris, 1875, 76. 8vo.*
- Notice sur les lois du frottement. *Tract. 4to. vol. 93.* *Paris, 1885. 4to.*
- Notice sur les rougeurs crépusculaires observées à la fin de 1883. *Tract. 8vo. vol. 412.* *Paris, 1885. 8vo.*
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- Recherches expérimentales et analytiques sur les lois de l'écoulement et du choc des gaz en fonction de la température. *Paris, 1886. 4to.*
- Recherches expérimentales sur la limite de la vitesse que prend un gaz quand il passe d'une pression à une autre plus faible. *Tract. 8vo. vol. 413.* *Paris, 1886. 8vo.*

- HIRN, G. A.—*continued*. Recherches expérimentales sur la relation qui existe entre la résistance de l'air et sa température. *Tract. 4to. vol. 91. Colmar, 1882. 4to.*
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- Remarques au sujet des notes de M. Hugoniot insérées aux "Comptes rendus" des 15 et 22 novembre. *Tract. 4to. vol. 105. Paris, 1886. 4to.*
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- Notice sur les élévateurs et plans inclinés pour canaux. (Atlas of plates.) *Paris, 1881. folio and 8vo.*
- Rapport fait au nom du Comité des arts mécaniques sur un mémoire de M. Dwelshauvers-Déry comportant l'étude de la température des parois dans un cylindre de machine à vapeur. *Tract. 4to. vol. 114. Paris, 1890. 4to.*
- Rapport présenté à la Commission centrale des machines à vapeur au nom de la sous-commission chargée des études et expériences relatives à l'eau surchauffée. *Tract. 8vo. vol. 383. Paris, 1884. 8vo.*
- HIRSCH, J., and DEBIZE, A. Leçons sur les machines à vapeur. (Atlas of plates.) *Paris, 1885. 8vo. and folio.*
- HIRSCH, M. Integral Tables; or, a collection of integral formulæ. *Lond. 1823. 8vo.*

- HIRT, A. Versuch über den allmählichen Anbau und Wasserbau des alten Aegyptens. *Tract. 4to. vol. 58.* Berlin, 1815. 4to.
- HITCH, C. Description of the patent method of constructing Buildings and Walls, with considerable saving of expense. *Tract. 8vo. vol. 59.* Lond. 1828. 8vo.
- HITCHCOCK, C. H. Geological Map of the United States and part of Canada. *Tract. folio. vol. 39.* 1886. folio.
- HITCHCOCK, E. Outline of the Geology of the Globe, and of the United States in particular; with two geological maps. 2nd edition. Boston, 1854. 8vo.
- HITCHCOCK, E., Jun. Physical Measurements. Cornell University. 1889. *Tract. folio. vol. 46.* New York, 1890. folio.
- HITTELL, J. S. Mining in the Pacific States of North America. San Francisco, 1861. 8vo.
- HITTORF, J. J. Notice historique de C. F. Schinkel. *Tract. 4to. vol. 42.* Paris, 1857. 4to.
- HOADLEY, —. On the disadvantageous action of Locomotive Engines upon Curved Roadway; and the remedy. *Tract. folio. vol. 5.* (Lithographed,) [1860?] folio.
- HOADLEY, J. C. Steam-Engine practice in the United States in 1884. *Tract. 8vo. vol. 383.* Boston, 1884. 8vo.
- Warm-Blast Steam-Boiler Furnace: a report upon a series of trials, etc. New York, 1886. 8vo.
- HOADLY, B., and WILSON, B. Observations on a series of Electrical Experiments. *Tract. 8vo. vol. 281.* Lond. 1756. 8vo.
- HOARE, C. Iron and Steel: a work for the forge, foundry, factory, and office. 8th edition. Lond. 1876. 12mo.
- Mensuration made easy; or the decimal system for the million, etc. *Tract. 8vo. vol. 119.* Lond. 1855. 8vo.
- HOBART TOWN OBSERVATORY. Observations made . . . by Col. E. Sabine: with abstracts of the observations from 1843 to 1850 inclusive. Vols. 2, 3. Lond. 1852–53. 4to.
- HOBBS, A. C. Hobbs' American lock. *Tract. 8vo. vol. 137.* Lond. [1860?] 8vo.
- The Construction of Locks; compiled from the papers of A. C. Hobbs, of New York, and edited by Charles Tomlinson. To which is added a description of J. Beverley Fenby's patent locks. and a note upon iron safes by R. Mallet. Lond. 1868. 8vo.
- HOBBS, W. R. P. The Arithmetic of Electrical Measurements, etc. Lond. 1887. 8vo.
- HOBLYN, R. D. A Manual of the Steam Engine. Lond. 1842. 8vo.
- HOBRECHT, J. Die Canalization von Berlin. (Atlas.) Berlin, 1884. 8vo. and folio.

- HOBSON'S BAY, *Victoria*. Report on the silting up of Hobson's Bay. *Lond.* 1869. folio.
- HOCHENBURGER, F. R. von. Über Geschiebsbewegung und Eintiefung fließender Gewässer. *Leipzig*, 1886. 8vo.
- HOCHSTETTER, F. von. New Zealand: its physical geography, geology, and natural history, with special reference to the results of Government expeditions in the province of Auckland and Nelson. *Stuttgart*, 1867. 8vo.
- HOCKING, S. A brief sketch of the life and labours of A. Woolf. *Tract.* 8vo. vol. 249. *Falmouth*, 1875. 8vo.
- HODDER, E. Cities of the World, etc. 3 vols. *Lond.* [1880.] 4to.
- HODGE, P. R. Analytical principles and practical application of the Expansive Steam Engine, etc. *Boston and Lond.* 1849. 4to.
- HODGES, A. A new and improved map of the Soonderbuns, etc. 1831. See INDIA.—SUNDERBUNS.
- HODGES, H. F. Notes on Mitering Lock Gates. [*Professional Papers of the Corps of Engineers, U.S. Army*, No. 26.] *Washington*, 1892. 8vo.
- HODGES, J. Construction of the great Victoria bridge in Canada. *Lond.* 1860. folio.
- HODGES, Sir W. A treatise on the Law of Railways, railway companies, and railway investments . . . 4th edition. By C. M. Smith. *Lond.* 1865. 8vo.
- Sixth edition, by J. M. Lely. *Lond.* 1876. 8vo.
- HODGETTS, E. A. B. The Death-trap in the House. *Tract.* 8vo. vol. 469. *Lond.* 1889. 8vo.
- Liquid Fuel: a paper read before the Civil and Mechanical Engineers' Society, etc. *Tract.* 8vo. vol. 479. *Lond.* 1889. 8vo.
- Liquid Fuel for mechanical and industrial purposes. *Lond.* 1890. 8vo.
- HODGETTS, J. F. The Hodgetts Safety Ship. *Tract.* 8vo. vol. 533. [*Lond.* 1892.] 8vo.
- HODGKIN, J. Definitions of some of the terms made use of in Geography and Astronomy. *Tract.* 4to. vol. 19. *Lond.* 1804. 4to.
- HODGKINSON, E. Chester and Holyhead Railway. Report, etc., 1846. See STEPHENSON, R., FAIRBAIRN, Sir W., and HODGKINSON, E. *Tract.* 8vo. vol. 279.
- Experimental researches on the strength and other properties of Cast Iron: forming a second part to the fourth edition of Tredgold's Practical Essay on the strength of cast iron. *Lond.* 1846. 8vo.
- Experimental researches on the strength of pillars of Cast Iron, and other materials. *Tract.* 4to. vol. 35. *Lond.* 1840. 4to.
(From the Phil. Trans.)

- HODGKINSON, E.—*continued*. Experimental researches on strength of pillars of Cast Iron from various parts of the kingdom. *Tract. 4to. vol. 41.* (From the Phil. Trans.) [Lond. 1857.]
- HODGKINSON, G. The Turkish and Egyptian Lighting and Li Dues in the Red Sea. [2nd Int. Mar. Congr.] [Lond. 1893.]
- HODGKINSON, J. [A letter on the subject of Railroads, addressed to W. Jones, Bridgend, dated from Newcastle, 24th Nov. 18 MS.] *Tract. 4to. vol. 36.* 1825.
- HODGKINSON, W. R. Notes on Explosives. *Tract. 8vo. vol. 1* Lond. 1891.
- HODGMAN, R. Report concerning the drainage of . . . various parishes in the East Riding of the county of York. *Tract. vol. 46.* Hull, 1796.
- HODGSON, B. H. Papers relative to the Himalaya Mountains Nepal, 1857. See INDIA.—HIMALAYA MOUNTAINS.
- HODGSON, J. S. Rivers Pollution Legislation. *Tract. 8vo. vol. 1* Lond. 1881.
- HODGSON, R. The High Level Bridge, Newcastle-on-Tyne. (Atl Newcastle, 1858. fr
- HODSON, G. A consideration of some of the conditions requisite obtaining Underground Water Supplies; illustrated by a description of the works for supplying Long Eaton und Melbourne (Derbyshire), and Castle Donnington, etc. *Tract. 8vo. vol. 50* Loughborough, 1893.
- Water Supply for Loughborough. Report on the Wood Brook and Black Brook Schemes. *Tract. 8vo. vol. 341.* Leicester, 1881.
- HOERSCHELMANN, E. DE. On some works of consolidation Canal Banks executed in Russia. [5th Int. Cong. Int. Nav.] [Paris, 1892.]
- The principal Reservoirs established in Russia. [5th Int. Cong. Int. Nav.] [Paris, 1892.]
- HOEY, D. G. Certificates as to the working of Hoey's patent system for the Ventilation of large halls, etc. *Tract. 4to. vol. 119.* [1891 ?]
- Report on the Ventilation Installation in Messrs. Barclay, Be Tritton and Co.'s Bank, Lombard St. [1891.] See LEE, J. T., HOEY, D. G.
- The science of Ventilation as applied to inhabited interiors, *Tract. 8vo. vol. 520.* Glasgow, [1891 ?]
- HÖFER, H. Beiträge zur Spreng- oder Minen-Theorie. *Tract. vol. 328.* Wien, 1880.
- Die Petroleum-Industrie Nordamerikas. *Tract. 8vo. vol. 287* Wien, 1877.

- HOFF, J. H. VAN' T. *Études de dynamique chimique. Tract. 8vo. vol. 381. Amsterdam, 1884. 8vo.*
- HOFFMAN, A., and OTHERS. Memorial of sundry proprietors and managers of American steam-vessels, on . . . the law relating to steamboats, etc. *Tract. 8vo. vol. 55. New York, 1840. 8vo.*
- HOFFMANN, E. *Das Telephon. Tract. 8vo. vol. 313. Berlin, 1878. 8vo.*
- HOFFMANN, L. *Der Langschwollen-Oberbau der Rheinischen Eisenbahn und die bekannteren zweitheiligen Oberbau-Systeme der Neuzeit. Tract. 8vo. vol. 318. Berlin, 1880. 8vo.*
- HOFFMEYER, N. *Cartes synoptiques journalières, embrassant l'Europe et le Nord de l'Atlantique. 5^{me} Trimestre. Dec. 1874—[Dec.] 1875. Copenhagen, 1876. obl. folio.*
- HOFMAN, H. O. *The Metallurgy of Lead, and the Desilverization of Base Bullion. New York, 1892. 8vo.*
- HOFFMANN, A. W. *The Chemical Laboratories in course of erection in the Universities of Bonn and Berlin. Lond. 1866. 4to.*
- *Report on Tenders for the Supply of Perchloride of Iron, etc. 1860. See MILLER, W. A., HOFMANN, A. W., and FRANKLAND, E.*
- *Report on the use of Lime as a Disinfectant of Sewage, etc. 1860. See MILLER, W. A., HOFMANN, A. W., and FRANKLAND, E.*
- HOFFMANN, A. W., and FRANKLAND, E. *Report on communication from Dr. Letheby, with reference to the quantity of Arsenic in Perchloride of Iron. Tract. 8vo. vol. 133. Lond. 1860. 8vo.*
- *Report on the Deodorization of Sewage. Tract. 8vo. vol. 133. Lond. 1859. 8vo.*
- HOFMANN, C. *A practical Treatise on the Manufacture of Paper, etc. Philadelphia, 1873. 4to.*
- HOGAN, J. *Railway Location and Working considered financially : with special application to through traffic on the Rajputana-Malwa Railway. Tract. folio. vol. 46. Bombay, 1890. folio.*
- HOGARD, H. *Recherches sur les formations erratiques. Paris, 1858. 8vo.*
- HOGG, A. *Alford District of Roads. Report showing the experience of the first season's work with the Stone Breaker and Automatic Delivery Appliance. Tract. folio. vol. 42. 1887. folio.*
- HOGG, J. *The Microscope : its history, construction, and application. 7th edition. Lond. 1869. 8vo.*
- *A microscopical examination of certain waters submitted to J. Hogg, and a chemical analysis by Dr. Campbell : with introductory notes by S. C. Homersham. Tract. 8vo. vol. 236. Lond. 1874. 8vo.*
- HOGG, T. T. *A few Notes on the Maritime Rule of the Road. [Papers of the Shipmasters' Soc. No. 5.] Lond. 1890. 8vo.*
- HOGGAR, R. S. *Plan of the City of Oxford. Lond. 1850. 8vo.*

HOHENEGGER, W. Der eiserne Oberbau. *Tract. 8vo. vol. 34*
Wien, 1886. f

HÖJER, J. Gamla och nya fyrtyper. *Tract. 4to. vol. 99.*
Stockholm, 1883.

(From the "Teknisk Tidskrift.")

HOKITIKA, N.Z. Hokitika and Greymouth. Reports of
Public Works Committee. *Wellington, 1877. f*

HOLBORN. A collection of the public statutes relating to sew
and local acts for Holborn and Finsbury. *Tract. 8vo. vol. 38*
Lond. 1830.

— Plan of the Sewers of Holborn and Finsbury. *Lond. 1846. f*

— Report of Improvement Committee of proceedings in connec
with the Holborn Valley Improvements. *Lond. 1872. f*

HOLDEN, E. Practical Guide to the manipulation of the Screw,
Lond. 1879. 16

HOLDEN, E. S. Addresses on the Inauguration of the Preside
California University. See HAGER, J. S., and HOLDEN, E. S.

— Earthquakes in California in 1890 and 1891. [*U.S. Geol. Sur*
Bulletin No. 95.] *Washington, 1892.*

— List of recorded Earthquakes in California, Lower Califor
Oregon, and Washington Territory. *Sacramento, 1887.*

HOLDFAST BAY, S. Australia. Holdfast Bay Railway Bill.
Adelaide, 1878. f

HOLDSWORTH, A. H. Dartmouth: the advantages of its har
as a station for foreign mail packets; and a short notice of
present and ancient condition. *Tract. 8vo. vol. 73.*
Lond. 1841.

— Description of the Revolving Rudder, invented by A.
Holdsworth. *Tract. 8vo. vol. 22.* *Lond. [1832?]*

— Improvements in constructing certain parts of Ships and Ves
in order to arrest the progress of Fire, and for regula
temperature, especially in steam-vessels and ships of war. *T*
See. vol. 72. *Lond. 1842.*

— A letter to the members for the county of Devon on the mono
of the Landed Interest. *Tract. 8vo. vol. 19.*
Exeter, 1826.

— Water Bulkheads for reducing the temperature and arresting
in ships or vessels. *Tract. 8vo. vol. 100.* *Lond. 1852.*

HOLDSWORTH, J. On the Extension of the English Coal-Fi
beneath the secondary formations of the Midland Counties. *A*
Does Coal exist near London? geologically considered.
Lond. 1866.

HOLE, J. National Railways: an argument for State Purchase.
Lond. 1893.

HOLEBROOK, J. P. Description and illustration of the improved methods of propelling Vessels, etc. *Tract. 8vo. vol. 55.*
Lond. 1838. 8vo.

HOLLAND.—[*Canals.*] Overzicht der Scheepvaartkanalen in Nederland op 1 Mei, 1879. 1879. 8vo.

— Rapport uitgebragt door de Commissie tot onderzoek der beste rivier afleidingen. 's *Gravenhage*, 1827. 4to.

— Statistiek der Scheepvaartbeweging op de Kanalen in Nederland in 1879–81. 1879–81. 8vo.

— [*Drainage.*] Verslag . . . uitgebragt door de Commissie tot onderzoek omtrent de droogmaking der plassen beoosten de Vecht. [With other reports on Drainage.]
The Hague, 1860–64. 4to.

— [*Education.*] Besluit van den 30sten Augustus, 1864, houdende vaststelling van een reglement voor de Rijks-hoogere burgeren landbouwerscholen. 1864. 8vo.

(Staatsblad van het Koninkrijk der Nederlanden. No. 91.)

— Overzicht van het middelbaar onderwijs bij het einde van 1867. 's *Gravenhage*, 1868. 8vo.

— Wet van den 2 den Mei 1863, houdende regeling van het middelbaar onderwijs. *Amsterdam*, 1863. 8vo.

— [*Meteorology.*] Nederlandsch meteorologisch Jaarboek voor 1881. *Utrecht*, 1882. folio.

— [*Navy.*] Memoriaal van de Marine, bevattende opgaven betrekkelijke de afmetingen, constructie, werktuigen, toetuiging en uitrusting vooral, doch niet uitsluitend, van Nederlandsche oorlogschepen en omtrent einige havens, dokken, sluizen, werven, enz. *Amsterdam*, 1876–1880. folio.

— [*Public Works.*] Verslag aan den Koning over de openbare werken in de jaren 1854(–78). *Gravenhage*, 1854–78. 4to.

— [*Railways.*] Chemin de fer hollandais. Devis pour la livraison de matériel pour voies ordinaires d'après les prix payés par la compagnie fin 1884, commencement 1885. *Tract. 8vo. vol. 39.*
 [1885.] 8vo.

— Statistiek van het vervoer op de spoorwegen over het jaar 1878–1880. 1878–80. 8vo.

— Verslag betreffende den aanleg der staatsspoorwegen. *The Hague*, 1875–81. 4to.

— [*Rivers.*] Aanteekeningen betrekkelijk ijsbezettingen en overstromingen langs de Nederlandsche rivieren.

's *Gravenhage*, 1861. 4to.

— The report of the Commission appointed by H.M. the King of Holland, March 15, 1821, to examine into the best means of preventing injury from the overflow of rivers.

's *Gravenhage*, 1827. 4to.

— De Nederlandsche hoofdrijvers en de plannen tot hunne verbetering, in populair toon beschreven door een' Oud' Soldaat. 2 vols. in 1. *Nijmegen*, 1850, 51. 8vo.

- HOLLAND.—[*Rivers*]*—continued.* Gegevens betrekkelijk de hoo-
rivierkaart. [1879?] 1
- Register bevattende de beschrijving van de peilschalen, hal-
bouden en endere verkenmerken langs de rivier de IJssel
other rivers in Holland]. 's Gravenhage, 1849-60. 1
(Published by the "Waterstaat.")
- Register der peilingen. [1843?-52.] 1
- [A set of Maps of the Dutch Rivers published by the Waterst.
[1879?] 1
- Tienjarig overzicht der waargenomen watershoogten lang
hoofd-rivieren in Nederland. 2 vols. 1861, 71. 1
- [Telegraphs.] [Annual Reports.] *The Hague*, 1855-78.
- HOLLAND, J. History and description of Fossil Fuel, etc. 1
See ANONYMOUS.
- HOLLERITH, H. A report on the Statistics of Steam and Wa-
Power used in the manufacture of Iron and Steel during Ce-
year ending May 31, 1880. [*U.S.A. 10th Census.* Vol. 22.]
Washington, 1888.
- Statistics of Power used in Manufactures. [*U.S.A. 10th Ce-*
Vol 2.] *Washington*, 1883.
- HOLLEY, A. L. An Adaptation of Bessemer Plant to the I
Process. *Tract.* 8vo. vol. 324. *New York*, 1880.
- American and European Railway Practice.
New York, 1861. 1
- Camps and tramps about Ktaadn. *Tract.* 8vo. vol. 295.
New York, 1878.
- Permanent Way and coal-burning locomotive boilers of Euro-
railways, etc. 1858. *See* COLBURN, Z., and HOLLEY, A. L.
- A treatise on Ordnance and Armour, etc. *New York*, 1865.
- Memorial of A. L. Holley. *New York*, 1884.
- HOLLIDAY, J. D. Dottings on Natal. *Tract.* 8vo. vol. 157.
Maritzburg, 1865.
- HOLLIS, G. An answer to the report of B. Bevan and R. E
engineer and surveyor, respecting the navigation of the
Itchin. *Tract.* 8vo. vol. 5. *Winchester*, 1809.
- HOLLOWAY, T. Levelling and its general application.
Lond. 1887.
- HOLLY, H. W. The Art of Saw Filing, etc.
New York, 1868. 1
- HOLMBERG, E. L. La sierra de Curá-malal (Curramalan), etc.
Buenos Aires, 1884.
- HOLME, A. H. Report on the Vyrnwy Waterworks. *Tract.*
vol. 417. *Liverpool*, 1886.
- HOLMES, A. B. Practical Electric Lighting. *Lond.* 1883.
- — 3rd edition. *Lond.* 1887.

- HOLMES, F. H., *Prof.* Holmes' Magneto-electric Light as applicable to Lighthouses. *Tract.* 8vo. vol. 380. 1862. 8vo.
(Privately printed.)
- HOLMES, G., and Co. Public Petitions Committee [N. Z.]. Report on the petition of George Holmes and Co. *Wellington*, 1877. folio.
- HOLMES, G. C. V. Marine Engines and Boilers. *Lond.* 1889. 8vo.
(One of the "South Kensington Museum Science Handbooks.")
- The Steam Engine. *Lond.* 1887. 8vo.
- HOLMES, J. H. H. A Treatise on the Coal Mines of Durham and Northumberland, *etc.* *Lond.* 1816. 8vo.
- HOLMES, W. C. Instructions for the management of Gas Works. *Lond.* 1874. 8vo.
- HOLMES, W. D. Report on Steam Communication with India *vid* the Red Sea. *Tract.* 8vo. vol. 382. *Lond.* 1838. 8vo.
- Report on the Midland Grand Junction Railway. With some remarks on the comparative facilities of the Midland and the Northumberland and Durham Coal Fields, for the supply of sea-borne coals to London. *Tract.* 8vo. vol. *Lond.* 1837. 8vo.
- HOLMES, W. H. Fossil Forests of the volcanic tertiary Formations of the Yellowstone National Park. *Tract.* 8vo. vol. 481. *Washington*, 1879. 8vo.
(From the "Bulletin of the U.S. Geol. and Geogr. Survey.")
- The Textile Fabrics of Ancient Peru. [Smithsonian Institution. Bureau of Ethnology.] *Washington*, 1889. 8vo.
- HOLT, A. Plateways. *Tract.* 8vo. vol. 356. *Liverpool*, 1883. 8vo.
- Remarks on the construction and strength of the cylindrical parts of Steam Boilers. *Tract.* 8vo. vol. 287. *Liverpool*, 1873. 8vo.
- Review on the Progress of Steam Shipping during the last quarter of a century. *Lond.* 1878. 8vo.
(From Min. Proc. Inst. C.E.)
- HOLT, H. F. Responsibilities of Navigation and Log Books. [Papers of the Shipmasters' Soc., No. 8.] *Lond.* 1891. 8vo.
- Shipping Stability and Stowage. [Papers of the Shipmasters' Soc., No. 18.] *Lond.* 1892. 8vo.
- HOLTHAM, E. G. Eight Years in Japan, 1873–1881, *etc.* *Lond.* 1883. 8vo.
- Imperial Government Railways. Tokio—Takasaki Section. Report on the proposed crossing of the Toda-Gawa. *Tract.* 8vo. vol. 340. *Kobe*, 1881. 8vo.
- The Permanent Way of first class Railways considered with reference to improvements in metal longitudinal sleepers. *Lond.* 1884. folio.

- HOLTZ, M. P. *Profils normaux pour canaux et dimensions de travaux d'art afférents aux voies navigables artificielles.* Vienne, 1886. 8vo —
- HOLTZAPFFEL, C. A list of Scales of equal parts, applicable to various purposes of engineering, etc. *Tract. 8vo. vol. 80.* Lond. 1838. 8vo —
- A new system of Scales of equal parts, etc. *Tract. 8vo. vol. 377.* Lond. 1838. 8vo —
- HOLTZAPFFEL, C. and J. J. *Turning and Mechanical Manipulation, etc.* 5 vols. Lond. 1843–84. 8vo.
- HOLWELL, J. A sure guide to the Practical Surveyor. Lond. 1678. 8vo.
- HOLYHEAD HARBOUR. Act for the purchase of lands for Harbours of Refuge, Holyhead. Lond. 1847. folio.
- Approval of Mr. Rendel's plans for a Harbour of Refuge at Holyhead. Lond. 1847. folio.
- Communication with Ireland. Report on Holyhead and Port Dynllaen Harbours, by Captain Back and Captain Fair. . . . Report of James Walker, etc. Lond. 1844. folio.
- Communications between the Treasury and the Board of Trade in reference to carrying into effect the recommendations . . . of the Select Committee appointed to inquire into Holyhead Harbour, etc. Lond. 1864. folio.
- Copies of all Reports not yet laid before Parliament . . . on the comparative merits of Holyhead and Port Dynllaen as a Harbour of Refuge for the Channel Trade, etc. Lond. 1846. folio.
- Copies of Reports of Sir John Rennie and Mr. Page upon the Harbours of Holyhead and Port Dynllaen . . . for improved communication between Dublin and London. Report of Mr. Rendel upon the Harbour of Holyhead . . . Letter . . . by S. Holland . . . relating to the navigation of the Menai Strait, and the effect thereupon of a fixed Bridge, etc. Lond. 1844. folio.
- Copy of Letters of Instructions to the naval officers and civil engineers appointed to report upon the Harbours of Holyhead and Portdynllaen as a Packet Station between London and Dublin . . . Report of Mr. Provis . . . on the Menai Bridge. Lond. 1844. folio.
- Copy of Correspondence respecting the Construction of a Deep-Water Pier and the removal of the Platters Rocks in Holyhead Harbour. Lond. 1890. folio.
- Copy of the Minutes of Evidence taken before the Commissioners appointed to inquire into Mr. Rendel's plan for proposed Harbour at Holyhead. Lond. 1847. folio.
- Copy of the Quarterly Reports of the Engineer in charge of the Harbour of Refuge Works, Holyhead, since 1 Jan. 1863. Lond. 1866. folio.

HOLYHEAD HARBOUR—*continued*. Correspondence . . . between H.M. Government and the Chester and Holyhead Railway Company, respecting the carrying H.M. Mails, and the construction of a Packet and Refuge Harbour at Holyhead, *etc.*

Lond. 1847. folio

— Final Report by J. Hawkshaw upon the completion of the Public Works at Holyhead Harbour. *Lond.* 1873. folio.

— Letter of Maj.-Gen. Sir L. Parry in reference to the proposed Harbour of Refuge at Holyhead ; also a copy of a plan by A. M. Rendel. *Lond.* 1846. folio.

— Report from the Committee on Holyhead Road and Harbour. [With estimate by J. Rennie.] *Tract.* 4to. vol. 4.

Lond. 1810. folio.

— Report from the Select Committee on Holyhead Harbour Bill ; with the minutes of evidence. *Lond.* 1847. folio.

— Report of the Commissioners for making Harbours of Refuge at Holyhead. *Lond.* 1847. folio.

— See also **LIVERPOOL**.—[*Harbour.*] Copies of Report and Survey, *etc.* 1837.

HOLYHEAD ROAD. General rules for repairing roads, recommended by the Parliamentary Commissioners for the improvement of the mail-coach road from London, by Coventry, to Holyhead. New edition. *Lond.* 1827. 8vo.

— Report of the Commissioners for repairing the roads from London to Holyhead by Chester, and between London and Bangor by Shrewsbury. *Lond.* 1816. folio.

— Reports from Committees [of the Houses of Parliament], 1810, 11, 15, 17, 19, 22, 30. *Lond.* 1810–30. folio.

— Returns respecting all sums of money granted and expended for the improvement of the Road from London to Holyhead.

Lond. 1830. folio.

— Twenty-seven reports of the Commissioners on the Roads from London to Holyhead. *Lond.* 1824–50. folio.

— Two reports from the Select Committee on the Road from London to Holyhead by Coventry, on the Bridge at Conway.

Lond. 1820. folio.

HOLZ, A. L. Ueber die Magnetisirung ellipsoidisch-geformter Eisen- und Stahlkörper, *etc.* *Tract.* 8vo. vol. 268.

Berlin, 1876. 8vo.

HOLZAPFEL, M. The Corrosion and Fouling of Ships. Antifouling Compositions. *Tract.* 4to. vol. 113. 1889. 4to.

HOME, E. On the power of the Eye to adjust itself to different distances, when deprived of the crystalline lens. *Tract.* 4to. vol. 19. *Lond.* 1802. 4to.

(From Phil. Trans. for 1801.)

HOME FARM COLLIERY, Lanarkshire. Report on the Home Farm Colliery Inundation. By J. Dickinson. *Lond.* 1877. folio.

HOMER. The Iliad of Homer. Translated by J. G. Corcoran.
2 vols. Lond. 1871.

HOMER, H. An inquiry into the means of preserving and improving the public Roads of this kingdom, etc. *Tract. 8vo. vol. 258.*
Oxford, 1767.

HOMERSHAM, S. C. An account of some observations made on the depth of Rain which falls in the same localities, at different seasons, in the hilly districts of Lancashire, Cheshire, and Derbyshire. *Tract. 8vo. vol. 110.* Lond. 1848.

— Canterbury Gas and Water. New water-supply. Report of the engineer to the waterworks, and a chemical analysis of the water, etc. *Tract. 8vo. vol. 194.* Lond. 1869.

— Report on the supply of surplus water to Manchester, Salford, and Stockport; with some remarks upon the construction of gauges, and the annual depth of rain falling in different localities around Manchester. Lond. 1848.

— Supplement. *Tract. 8vo. vol. 83.* Lond. 1848.

— Report to the Directors of the London (Watford) Spring Water Company. *Tract. 8vo. vol. 378.* Lond. 1850.

— Review of the Report by the General Board of Health on the supply of water to the Metropolis; contained in a report to the Directors of the London (Watford) Spring Water Company. *Tract. 8vo. vol. 83.* Lond. 1850.

— Supply of Pure Spring Water to the Metropolis. Report to the Directors of the London (Watford) Spring Water Company. 4th edition. *Tract. 8vo. vol. 523.* Lond. 1850.

HONDURAS RAILWAY. A true history of the Honduras Railway. By the Cavalier de S. *Tract. 8vo. vol. 302.*
Lond. [1872.]

HONG KONG. Copy or extracts of despatches . . . respecting restrictions laid upon the Chinese Merchants with a view to reserving the central portion of the town of Victoria for English and foreign firms; and respecting the attempts made to drive the Chinese by regulations as to Chinese graves, sanitation, and the compulsory publication of Chinese partnerships.
Lond. 1881.

— Copy or extracts of further correspondence regarding the sanitary condition of Hong Kong and alleged restrictions upon the Chinese, etc. Lond. 1882.

— Further Correspondence on the sanitary condition of Hong Kong, etc. Lond. 1882.

— Mr. Chadwick's Reports upon the sanitary condition of Hong Kong, with appendices and plan. Lond. 1882.

— Report [by O. Chadwick] on proposed Water Ordinance for the Colony of Hong Kong. [Contains Tariff and regulations of the Berlin Municipal Waterworks, of 1878.] [Lond. 1883.]

- HONG KONG—*continued*. Report from Government Astronomer on the Meteorology of Hong Kong, with instructions for making meteorological observations. *Tract. folio. vol. 36.*
Hong Kong, 1883. folio.
- [Observatory.] Observations and researches made . . . in 1884, etc., by W. Doberck. *Hong Kong, 1886, etc. folio.*
- HONIGMANN, M. Bericht über die Natronlocomotiven. *Tract. 4to. vol. 104.*
Aachen, 1887. 4to.
- Die feuerlose Dampfmaschine mit Natron-Füllung. *Tract. 4to. vol. 97.*
Aachen, 1885. 4to.
- Ein neues Verfahren Locomotiven oder andere Dampfmaschinen feuerlos mittelst des Natrondampfkessels zu betreiben. *Tract. 4to. vol. 104.*
[1885 ?] 4to.
- HONSELL, M. Der Bodensee und die Tieferlegung seiner Hochwasserstände. (Atlas.) *Stuttgart, 1879. 4to. and 8vo.*
- Die Hamburger Eisbrecher und ihre Anwendung auf Binnenslands-Strömen, insbesondere auf dem schiffbaren Rhein zur Abwehr der Eisgefahr. *Tract. 8vo. vol. 334. Mannheim, 1880. 8vo.*
- Der natürliche Strombau des deutschen Oberrheines. *Tract. 8vo. vol. 451. Berlin, 1887. 8vo.*
- Über die kulturgeographische Bedeutung der Flüsse und ihre Entwicklung als Verkehrswege. Vortrag.
Frankfurt a. M., 1888. 8vo.
- HOOD, C. On some peculiar changes in the internal structure of Iron, independent of and subsequent to the several processes of its manufacture. *Tract. 8vo. vol. 56. Lond. 1842. 8vo.*
 (From Min. Proc. Inst. C.E.)
- On the properties and chemical constitution of Coal; with remarks on the various methods of measuring its calorific effects, and preventing the loss which occurs during its combustion. *Tract. 8vo. vol. 58. Lond. 1841. 8vo.*
 (From Min. Proc. Inst. C.E.)
- A practical treatise on Warming Buildings by Hot Water; and an inquiry into the laws of radiant and conducted heat, etc.
Lond. 1837. 8vo.
- — 2nd edition. *Lond. 1844. 8vo.*
- — 3rd edition. *Lond. 1855. 8vo.*
- — 4th edition. *Lond. 1869. 8vo.*
- — 5th edition, to which are added an inquiry into the law of radiant and conducted heat, the chemical constitution of coal, and the combustion of smoke. *Lond. 1879. 8vo.*
- HOOFF, J. OP DEN. Observations sur l'écrit allemand: De la navigation du Rhin considéré dans ses rapports avec le royaume des Pays-Bas. [Translated from the Dutch.] *Tract. 8vo. vol. 24. Amsterdam, 1828. 8vo.*
- HOOLEY, E. P. Sanitary work in rural districts. *Tract. 8vo. vol. 520. Lond. 1892. 8vo.*

- HOOPER, W. Concise account of Submarine Telegraph Cables, *etc.*
Tract. 4to. vol. 45. Lond. 1862. 4to.
- India Rubber considered in reference to its applicability as an
insulator for telegraphic conductors. *Tract. 4to. vol. 66.*
Lond. 1865. 4to.
- HOOSAC TUNNEL. Hoosac Tunnel: a history of the great enter-
prise from the beginning to November, 1873. [Newspaper cut-
tings.] *Tract. 8vo. vol. 234. Boston, 1873. 8vo.*
- HOPE, Right Hon. A. J. B. B. England, the North, and the South.
Being a popular view of the American civil war. 4th edition.
Tract. 8vo. vol. 142. Lond. 1862. 8vo.
- Public Offices and Metropolitan Improvements. *Tract. 8vo.*
vol. 124. Lond. 1857. 8vo.
- Speech in moving the rejection of the Metric Weights and
Measures Bill. *Tract. 8vo. vol. 168. Lond. 1868. 8vo.*
- The World's Debt to Art: a lecture, *etc.* *Tract. 8vo. vol. 134.*
Lond. 1863. 8vo.
- HOPE, T. An historical essay on Architecture; illustrated from
drawings made in Italy and Germany. 3rd edition. 2 vols.
Lond. 1840. 8vo.
- See CRESY, E. An analytical index to An historical Essay on
Architecture, by T. Hope. 1836.
- HOPE, T. C. Reports on improving the Supply of Water for
Edinburgh. 1813. See TELFORD, T., and HOPE, T. C.
- HOPE, W. Metropolitan Board of Works. Letter which accompanied
the copies of W. Hope's paper on the Distribution and Agricul-
tural Use of Town Sewage. *Tract. 8vo. vol. 478.*
Barking, 1869. 8vo.
- Metropolitan Board of Works. Proposition for a Concession of
the Sewage of the northern area of the Metropolis. 1861. See
NAPIER, Hon. W., and HOPE, W.
- HOPKIN, E. An abstract of the particulars contained in a peram-
bulatory Survey of above 200 miles of Turnpike-road through the
counties of Carmarthen, Brecknock, Monmouth, and Gloucester.
Tract. 8vo. vol. 74. Swansea, 1805. 8vo.
- HOPKINS, E. On the connexion of Geology with terrestrial
Magnetism, *etc.* *Lond. 1844. 8vo.*
- — 2nd edition. *Lond. 1851. 8vo.*
- — 3rd edition. *Tract. 8vo. vol. 379. Lond. 1855. 8vo.*
- On the Geology of the Gold-bearing Rocks of the world, and the
gold-fields of Victoria. *Tract. 8vo. vol. 116.*
Melbourne, 1853. 8vo.

- HOPKINS, E.—*continued*. On the Vertical Structure of the Primary Rocks, and the general character of their Gold-bearing Varieties. *Tract. 8vo. vol. 502.* (From Min. Proc. Inst. C.E.) *Lond.* 1856. 8vo.
- A short memoir of William Stuart, superintendent engineer of the Plymouth breakwater, *etc.* *Tract. 8vo. vol. 134.* *Lond.* 1855. 8vo.
- HOPKINS, G. M. Experimental Science: elementary, practical, and experimental physics. *New York*, 1890. 8vo.
- HOPKINS, H. The pupil's manual of exercises in Mental Arithmetic. . . 3rd edition. *Lond.* 1852. 12mo.
- HOPKINS, J. A drawing and explanation of a new Safety Rail for railways, *etc.* *Tract. 8vo. vol. 70.* *Lond.* [1846.] 8vo.
- HOPKINS, R. A letter to the Right Hon. the Commissioners of Railways, on Railway Compensation Practice, with suggestions for its improvement. *Tract. 8vo. vol. 82.* *Lond.* 1849. 8vo.
- HOPKINS, R. and R. Plan de la ville de Boulogne-sur-mer et de ses environs. 1844. 8vo.
- HOPKINS, W. Address delivered at the anniversary meeting of the Geological Society of London. *Tract. 8vo. vol. 100.* *Lond.* 1852. 8vo.
- HOPKINSON, E. Dynamo-Electric Machinery. 1886. *See* HOPKINSON, Dr. JOHN, and HOPKINSON, E.
- The Transmission of Power by Electricity. The Portrush Electrical Railway, *etc.* 1883. *See* SIEMENS, A., and HOPKINSON, E.
- The general Theory of Dynamo Machines. *Tract. 8vo. vol. 446.* 1887. 8vo.
- HOPKINSON, Dr. JOHN, F.R.S. Dielectric Capacity of Liquids. *Tract. 8vo. vol. 434.* *Lond.* 1881. 8vo.
- The Electrostatic Capacity of Glass. *Tract. 8vo. vol. 434.* *Lond.* 1880. 8vo.
- Electrostatic Capacity of Glass and of Liquids. 2 pt. *Tract. 4to. vol. 105.* *Lond.* 1877, 81. 4to.
- Group-Flashing Lights. 1874. *Birmingham*, 1890. 8vo.
- Magnetic and other Physical Properties of Iron at a high temperature. *Tract. 4to. vol. 112.* *Lond.* 1889. 4to.
- Magnetic properties of Alloys of Nickel and Iron. *Tract. 8vo. vol. 495.* *Lond.* 1890. 8vo.
- Magnetisation of Iron. *Tract. 4to. vol. 105.* *Lond.* 1885. 4to.
- The Mathematical Theory of Tartini's Beats. *Tract. 8vo. vol. 433.* [Lond.] 1872. 8vo.
- Note on Mr. E. H. Hall's Experiments on the "Action of Magnetism on a permanent Electric Current." *Tract. 8vo. vol. 434.* [Lond.] 1880. 8vo.

- HOPKINSON, Dr. JOHN, *F.R.S.*—*continued.* Notes on the seat of the Electromotive Forces in a Voltaic Cell. *Tract. 8vo. vol. 434.*
[*Lond.*] 1885. 8vo.
- On an unnoticed Danger in certain Apparatus for Distribution of Electricity. *Tract. 8vo. vol. 434.* [*Lond.*] 1885. 8vo.
- On Electric Lighting. [Two papers.] *Tract. 8vo. vol. 439.*
[*Lond.*] 1879, 80. 8vo.
- On the Optical Properties of a Titano-Silicic Glass. 1875. *See* STOKES, Sir G. G., and HOPKINSON, J.
- On the Quadrant Electrometer. *Tract. 8vo. vol. 434.*
[*Lond.*] 1885. 8vo.
- On the Refractive Index and Specific Inductive Capacity of Transparent Insulating Media. *Tract. 8vo. vol. 434.*
[*Lond.*] 1882. 8vo.
- On the Stresses caused in an Elastic Solid by Inequalities of Temperature. *Tract. 8vo. vol. 434.* [*Lond.*] 1879. 8vo.
- On the Thermo-Elastic Properties of Solids. *Tract. 8vo. vol. 434.*
[*Lond.* 1887?] 8vo.
- On the Torsional Strain which remains in a Glass Fibre after release from Twisting Stress. *Tract. 8vo. vol. 434.*
Lond. 1878. 8vo.
- Original Papers on Dynamo Machinery and allied subjects.
[American edition.] *New York, 1893.* 8vo.
- Presidential address to the Junior Engineering Society on the Cost of Electric Supply. *Tract. 8vo. vol. 515.* *Lond.* 1892. 8vo.
- Refractive Indices of Glass. *Tract. 8vo. vol. 434.*
[*Lond.*] 1877. 8vo.
- The Residual Charge of the Leyden Jar. *Tract. 4to. vol. 105.*
Lond. 1876. 4to.
- Residual Charge of the Leyden Jar. Dielectric Properties of different Glasses. *Tract. 4to. vol. 105.* [*Lond.*] 1877. 4to.
- HOPKINSON, Dr. JOHN, *F.R.S.*, and HOPKINSON, E. Dynamo-Electric Machines—Preliminary Notice. *Tract. 8vo. vol. 434.*
Lond. 1886. 8vo.
- Dynamo-Electric Machinery. *Tract. 4to. vol. 100.* 1886. 4to.
- HOPKINSON, JOHN, *F.L.S.*, *F.G.S.* The Geology of London. *Tract. 8vo. vol. 526.* 1889. 8vo.
- Half a Century's Rainfall in Hertfordshire. *Tract. 8vo. vol. 527.*
1890. 8vo.
- List of Works on the Geology of Hertfordshire, 1874–83. *Tract. 8vo. vol. 526.* 1885. 8vo.
- On the recent discovery of Silurian Rocks in Hertfordshire, and their relation to the water-bearing strata of the London Basin. *Tract. 8vo. vol. 526.* 1880. 8vo.

- HOPKINSON, JOHN, *F.L.S., F.G.S.*—*continued*. Royal Commission on Metropolitan Water Supply. Statement . . . on Hertfordshire Rainfall, Percolation and Evaporation. *Tract. folio. vol. 48.* [Lond. 1892.] folio.
- Schedule of subjects of local interest recommended for investigation by Provincial Scientific Societies. *Tract. 8vo. vol. 526.* Hertford, 1890. 8vo.
- A sketch of the Geology and Climate of Hertfordshire, with notes on its botanical districts. *Tract. 4to. vol. 119.* Hertford, 1887. 8vo.
- Water and Water-Supply, with special reference to the supply of London from the chalk of Hertfordshire. *Tract. 8vo. vol. 523.* Hertford, 1891. 8vo.
- HOPKINSON, JOSEPH. The Working of the Steam-engine explained by the use of the indicator. 5th edition. Lond. 1871. 8vo.
- — 7th edition. Huddersfield, 1875. 8vo.
- HOPPE, E. Die Accumulatoren für Elektrizität. Berlin, 1888. 8vo.
- Geschichte der Elektrizität. Leipzig, 1884. 8vo.
- HOPPE, O. Die Bergwerke, Aufbereitungs-Anstalten und Hütten . . . im Ober- und Unter-Harz. 2 pt. Clausthal, 1883. 8vo.
- HOPPER, T. Hopper *versus* Cust on the subject of rebuilding the Houses of Parliament. [A reply to Sir E. Cust's pamphlet on the subject.] *Tract. 8vo. vol. 293.* Lond. 1837. 8vo.
- A letter to Lord Viscount Melbourne, on the rebuilding of the Royal Exchange. *Tract. 4to. vol. 59.* Lond. 1839. 8vo.
- HOPTON, W. Conversation on Mines. Manchester, 1883. 8vo.
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- Description du projet de campement ou de casernement normal pour infanterie ou cavalerie, soit par destination première ou par transformation ultérieure, avec résumé d'un devis estimatif des dépenses de construction. *Tract 4to. vol. 42.* Lond. 1856. 8vo.
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- New invented Steam Wheel or Engine for raising water, etc. [Patent Specification, 1805.] Lond. 1855. 8vo.

- HORNBLOWER, J.—*continued*. A Machine or Engine for raising water and other liquids, and for other purposes, by means of Fire and Steam. [Patent Specification, 1781.] *Lond.* 1856. 8vo.
- HORNBOSTEL, C. Wien's Wasserversorgung, 1862. *See Fölsch, A., and HORNBOSTEL, C.*
- HORNCastle NAVIGATION. Act for enlarging and improving the Tattershall Navigation and extending the same into the River Bain, and for making the River Bain navigable from thence into the town of Horncastle, *etc.* *Lond.* 1792. folio.
- HORNE, H. Essays concerning Iron and Steel. *Lond.* 1773. 8vo.
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- HORNSBY, R., and Sons. A machine for distributing Sand, Gravel, or Salt upon Asphalt. [MS.] *Tract.* 4to. vol. 83. *Lond.* 1880. 4to.
- HORNSEY LOCAL BOARD. Catalogue of Sanitary Appliances at the Museum, *etc.* *Lond.* [1892.] 8vo.
- Report to the General Purposes Committee of the Hornsey Local Board upon the Flooding at Campsbourne, August, 1886 [by T. de C. Meade]. *Tract.* 8vo. vol. 426. *Lond.* 1886. 8vo.
- Report to the Hornsey Local Board in committee on Team Work, having special reference to the scavenging, cleansing, dusting, and road material contracts [by T. de C. Meade]. *Tract.* 8vo. vol. 372. *Lond.* 1855. 8vo.
- Report to the Hornsey Local Board on the Hornsey Drainage [by T. de C. Meade]. *Tract.* folio. vol. 40. *Lond.* 1886. folio.
- Report to the Hornsey Local Board on Sewer Ventilation [by T. de C. Meade]. *Tract.* 8vo. vol. 426. *Lond.* 1881. 8vo.
- Report to the Hornsey Local Board on the Drainage of the Northern Portion of the District, July, 1885 [by T. de C. Meade]. *Tract.* 8vo. vol. 426. *Lond.* 1885. 8vo.
- Report to the Lighting Committee of the Hornsey Local Board upon the present Lighting of the District, 27th June, 1882 [by T. de C. Meade]. *Tract.* 8vo. vol. 426. *Lond.* 1882. 8vo.
- Report to the Hornsey Local Board on the Proposed New Mortuary Buildings [by T. de C. Meade]. *Tract.* 8vo. vol. 426. *Lond.* 1885. 8vo.
- Review by the Chairman of the work of the Board during the year 1888–89. *Lond.* 1889. 8vo.
- HORSBURGH, J. The India Directory; or, directions for sailing to and from the East Indies, China, Australia, and the inter-jacent ports of Africa and South America. 7th edition. 2 vols. *Lond.* 1855. 4to.
- HORSLEY, S. Travancore Irrigation and an account of the opening of the Pandian Caul Head Works. *Tract.* 8vo. vol. 406. *Madras*, 1885. 8vo.

- HORST, T. VAN DER, and POLLEY, J. *Theatrum machinarum universale; of keurige verzameling van verscheide grote en zeer fraaie waterwerken, schutsluysen, waterkeringen, ophaal- en draaibruggen. Met hare gronden, opstallen en doorgesnedens.* 2 pt. *Tract.* 8vo. vol. 383. *Amsterdam, 1737-74.* 8vo.
- [Plates.] 2 vols. folio.
- HORTA. *Notice sur le port-artificiel de la ville de Horta, île de Fayal, archipel des Açores.* *Tract.* 8vo. vol. 305. *S. Miguel, 1877.* 8vo.
- HORTICULTURAL SOCIETY. *See* ROYAL HORTICULTURAL SOCIETY.
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- *Remarks on the Channel Passage, and on the paramount importance of Dover for offensive and defensive warfare.* *Tract.* 8vo. vol. 230. *Lond.* 1873. 8vo.
- *Remarks on the inefficiency of the Steam Navy for general service and the purposes of war.* *Tract.* 8vo. vol. 177. *Lond.* 1866. 8vo.
- *Remarks on the late war with Russia; together with plans for the attack on Cronstadt, Sweaborg, and Helsingfors, etc.* *Lond.* 1857. 8vo.
- *Remarks on the naval, military, and financial Resources of Great Britain.* *Tract.* 8vo. vol. 176. *Lond.* 1868. 8vo.
- *Remarks on the rapid Transmission of Troops to India, and on the practicability of promptly establishing effectual means of conveyance between the sea-coast and the interior by the navigation of the great rivers by steam, etc.* *Tract.* 8vo. vol. 122. *Lond.* 1858. 8vo.
- HOSKLER, V., *Capt.* *A guide for the Electric Testing of Telegraph Cables.* 2nd edition. *Lond.* 1879. 8vo.
- *Laying and repairing of Electric Telegraph Cables.* *Lond.* 1878. 8vo.
- HOSKING, W. *Essay and treatises on the Practice and Architecture of Bridges.* *Lond.* 1843. 8vo.
(Twenty-five copies printed for private distribution.)
- *A Guide to the proper regulation of Buildings in Towns, etc.* *Lond.* 1848. 8vo.
- *An introductory Lecture, delivered at King's College . . . and addressed to the class of Civil Engineering and Architecture.* *Tract.* 8vo. vol. 68. *Lond.* 1841. 8vo.
- *An introductory Lecture . . . on the principles and practice of Architecture, etc.* *Tract.* 8vo. vol. 59. *Lond.* 1842. 8vo.

- HOSKING, W.—*continued*. On the introduction of Constructions retain the sides of deep Cuttings in Clays or other uncert soils. *Tract. 8vo. vol. 500.* *Lond. 1844.* 8
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- Mémoire général et spécial sur les mines, la métallurgie, les sur les mines . . . dans la République Argentine. *Buenos Aires, 1889.* 8
- HOSPITALIER, E. L'électricité dans la maison. *Paris, 1885.* 8
- — 2^e édition, entièrement refondue. *Paris, 1887.* 8
- Domestic Electricity for Amateurs : translated . . . with additions by C. J. Wharton. *Lond. 1885.* 8
- Formulaire de l'électricien. Année 1, (4, etc.) *Paris, 1883, 86, etc.*
- The Electrician's Pocket-book. *Lond. 1884.*
- Les principales applications de l'électricité. *Paris, 1881.*
- The modern applications of Electricity : translated by J. Ma *Lond. 1881.*
- — 2nd edition. 2 vols. *Lond. 1883.*
- HOSTE, P. P. L'art des armées navales, ou traité des évolutions navales. *Lyon, 1697.* 4
- A treatise on Naval Tactics. Translated by Captain J. Boswall. With additional notes. *Edinb. 1834.*
- HOTSON, W. C. The principles of Arithmetic. 2nd edition. *Cambridge, 1840.*
- HOUGH, H. G. Diving : or, an attempt to describe upon hydrostatic principles, a method of supplying the lungs with air under water. *Tract. 8vo. vol. 229.* *Lond. 1813.*
- HOUGHTON, T. Royal Institutions : being Proposals for articles to establish and confirm laws, liberties, and customs of Silver and Gold Mines, to all the King's Subjects in such parts of Asia and America, which are now (or shall be) annexed to the Crown of England. With rules, laws, and methods of Mining, etc. *Lond. 1694.*

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Lond. 1879. folio.
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Lond. 1862. 4to.
- HOUSLOW. Report on the circumstances attending an Explosion which occurred in the lower glazing-house of the Gunpowder Factory of Messrs. Curtis and Harvey at Houslow on the 3rd May, 1887.
Lond. 1887. folio.
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Lond. 1835. 8vo.
- Result of an inquiry by Charles Barry, H. T. de la Beche, William Smith, &c., with reference to the selection of stone for building the new Houses of Parliament. *Lond.* 1839. folio.
 - Reports from the select committee on Ventilation and Lighting. Minutes of evidence and appendices. *Lond.* 1852. 8vo.
 - Copy of report on the Ventilation, Warming, and Lighting of the Houses of Parliament. By Dr. Percy. *Lond.* 1866. folio.
 - Decay of Stone. Copy of all reports on the results of the experiments made for preventing decay in the stone of the Houses of Parliament. *Lond.* 1868–70. folio.
 - Copy of report and plans on the subject of the sanitary arrangements of the Houses of Parliament. *Lond.* 1885. folio.
 - First (Second) Report from the Select Committee on Ventilation. *Lond.* 1886. folio.
- HOUSSELLE, —. Der Brückenbau. 1893. *See* BARKHAUSEN, G., NESSENIUS, —, and HOUSSELLE, —.
- HOUSTON, E. J. A Dictionary of Electrical words, terms and phrases. *New York*, 1889. 8vo.
- — 2nd edition. *New York*, 1892. 4to.
- HOUSTON, E. J., and OTHERS. Primers of Electricity. 3rd edition. *Lond.* 1887. 8vo.

- HOUZEAU, L. *Télégraphie électrique : guide pratique pour l'emploi de l'appareil Morse.* Paris, 1874.
- HOVELL-THURLOW, Hon. T. J. *Trade Unions abroad, hints for home legislation. Reprinted from a Report on Amsterdam Exhibition of Domestic Economy for the World Classes.* 2nd edition. Lond. 1871.
- HOVGAARD, G. W. *Submarine Boats.* Lond. 1887.
- HOWARD, J., M.P. *A paper on Cultivation of the Land by Steam power ; read before the Midland Farmers' Club.* Tract. vol. 181. Birmingham, 1869.
- *A trip to America : a lecture, etc.* Tract. 4to. vol. 63. Bedford, 1867.
- HOWARD, L. *Barometographia : twenty years' variation of barometer in the climate of Britain, exhibited in autographic curves, with the attendant winds and weather, etc.* Lond. 1847. f
- *Papers on Meteorology, relating especially to the climate of Britain, and to the variations of the barometer.* Lond. 1854.
- (Being Part I. of the appendix to *Barometographia*.)
- *The Climate of London, deduced from meteorological observations.* 2nd edition. 3 vols. Lond. 1833.
- *Essay on the Modifications of Clouds.* 3rd edition. Lond. 1865.
- *Seven lectures on Meteorology.* Pontefract, 1837.
- HOWARD, T. *Report to the Chairman and Committee of the Bristol Docks.* [MS.] Tract. folio. vol. 27. 1859. f
- *Report (second report) on the question of dockising the River Avon.* Tract. folio. vols. 27 and 30. Bristol, 1879–81. f
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- HOWDEN, J. *On Combustion of Fuel in Furnaces of Steam Boilers by natural draught and by supply of Air under pressure.* Tract. 4to. vol. 110. Lond. 1884.
- *On various Theories of the Screw-propeller.* Tract. 4to. vol. [Lond. 1890.]
- HOWE, H. M. *Copper Smelting.* [U.S. Geol. Survey. Bull. No. 26.] Washington, 1885.
- *The Heat Treatment of Steel.* Tract. folio. vol. 43. New York, 1889. f
- *The Metallurgy of Steel.* Vol. 1. New York, 1890.
- *Steel for Warfare.* Tract. 8vo. vol. 457. [1886.]

- HOWELL and Co. Tables of Diameters and Thicknesses of Wrought-iron and Steel Tubes to resist hydraulic pressures of from 500 lbs. to 20,000 lbs. per square inch ; together with a table of approximate Weights per lineal foot. *Sheffield*, 1891. 4to.
- HOWELL, C. W. Statement respecting the Improvements at the mouth of the Brazos River, Texas. *Tract*. 8vo. vol. 485. *New Orleans, La.*, 1872. 8vo.
- HOWELL, G. Conflicts of Capital and Labour. *Lond.* 1878. 8vo.
- Handy-book of the Labour Laws. *Lond.* 1876. 8vo.
- HOWELL, G. W. Newark Aqueduct Board. Report on additional Water Supply, 1879. See CROES, J. J. R., and HOWELL, G. W.
- HOWELL, H. H. The Geology of the Warwickshire Coal-field, etc. [*Memoirs of the Geological Survey.*] *Lond.* 1859. 8vo.
- HOWLETT, Rev. J. H. Metrical Chronology. . . . 5th edition, etc. *Lond.* 1855. 8vo.
- HOWTH HARBOUR. Report. *Lond.* 1810. folio.
- [Another edition.] With minutes of evidence and Appendices Nos. 1 to 5, containing reports of Messrs. Rennie and Huddart, etc. *Tract*. 4to. vol. 16. *Lond.* 1810. 4to.
- HOYER, E. Lehrbuch der vergleichenden mechanischen Technologie. *Wiesbaden*, 1878. 8vo.
- HOYLAKE. Report of the circumstances attending the Collision near Hoylake Station on the Seacombe, Hoylake, and Deeside Railway, on the 7th February, 1888. *Lond.* 1888. folio.
- HUART, E. d'. Mode de constater le poids de bétail. *Tract*. 8vo. vol. 53. *Bruzelles*, 1836. 8vo.
- HÜBBE, H. Einige Wasserstands-Beobachtungen im Fluthgebiete des Elbstromes. *Tract*. 4to. vol. 47. *Hamburg*, 1842. 4to.
- Erfahrungen und Beobachtungen im Gebiete der Strombaukunst. Vol. 1. *Hamburg*, 1853. 4to.
- Gutachtliche Erörterungen der Ursachen der fortschreitenden Vertiefung der Elbe am Altonaer Hafen. (Fortsetzung.) *Tract*. folio. vol. 11. *Hamburg*, 1851. folio.
- Reisebemerkungen, hydrotechnischen Inhalts. *Hamburg*, 1844. 4to.
- Ueber die Eigenschaften und das Verhalten des Schlicks. *Tract*. folio. vol. 8. *Berlin*, 1860. folio.
- Von der Beschaffenheit und dem Verhalten des Sandes. *Tract*. folio. vol. 8. *Berlin*, 1861. folio.
- Von der Bewegung des Wassers im Sande. *Tract*. folio. vol. 8. *Berlin*, 1861. folio.
- HUBER, J. L. Bericht über die im Jahre 1886 mit elektrischem Strassenbahn-Betrieb (System Julien) in Hamburg angestellten Versuche. *Tract*. 4to. vol. 108. *Hamburg*, 1888. 4to.

- HUBERT, H. Les moteurs thermiques autres que la machine à vapeur. Étude théorique et pratique sur les moteurs à gaz, à essence, à pétrole et à air chaud. Liège, 1892.
- HUBERTI, A. Traité d'exploitation des chemins de fer. 1885, See FLAMACHE, A., and HUBERTI, A.
- HUCK, C. Die Bauconstructionslehre. Leipzig, 1871.
- HUCKRALE, H. W. Improved Railway Switch and lock apparatus. Tract. 8vo. vol. 238. Lond. 1874.
- HUDDART, J., Capt. Eau Brink New River, or Cut. Deed stating the opinion (in the nature of an award) of J. Huddart pursuant of the reference to him by Sir Thomas Hyde Page, Robert Mylne, under the powers of an Act of Parliament, George III. c. 77. Tract. 4to. vol. 54. Lond. 1804.
- On the improvement in manufacturing of Cordage, etc. Tract. 4to. vol. 38. Lond. 1804.
- Report upon the improvement of the Port and Harbour Boston. Tract. 4to. vol. 54. Lond. 1800.
- Swansea Harbour. Extracts from the report of Joseph Huddart addressed to the trustees, showing plan for the improvement thereof, dated 1794. Tract. 8vo. vol. 92. Lond. 1804.
- Second report, showing plan for the further improvement thereof, dated 1804. Tract. 8vo. vol. 92. Lond. 1804.
- HUDDART, J., Jun. Memoir of Capt. J. Huddart. Lond. 1821.
- HUDDESFIELD CANAL. Act for making a navigable Cut from the Canal of Sir J. Ramsden at Huddersfield . . . to with the Canal from Manchester to Ashton-under-Lyne Ashton, etc. Lond. 1794.
- Act to amend the Huddersfield Canal Act of 1794. Lond. 1800.
- HUDDESFIELD TECHNICAL SCHOOL. Calendar, 1889. Huddersfield, 1889.
- HUDE, H. v. D. Oeffentliches Schlachthaus in Buda-Pest. 18 See HENCKES, J., and HUDE, H. v. D.
- HUDDLESTON, L. A summary specification of a method of conveying boats or barges from a higher level to a lower, and vice versa on Canals, by the immersion of a plunger or plungers. Tract. 8vo. 61. Gillingham, 1801.
- HUDDLESTON, W. H. Diamond Rock of South Africa. Tract. 8vo. 110. (Proc. Geological Assoc.) Lond. 1885.
- The Geology of Palestine, etc. Lond. 1885.
- HUDDON, Wm. Bridge across the Hudson River at New York. New York. 8vo. 533. Washington, 1891.
- HUDDON, J. A. The Law of Building and Engineering Contracts and of the duties and liabilities of Engineers, Architects, Surveyors and Valuers. Lond. 1891.

- HUDSON, J. F. The Railways and the Republic. 8vo.
New York, 1886. 8vo.
- HUDSON, J. R. Tables for calculating the cubic contents of
Excavations and Embankments by an improved method of
diagonals and side triangles. 2nd edition.
New York, 1886. 8vo.
- HUDSON, R. S. On Dynamite in its Sanitary Aspect. *Tract.* 8vo.
vol. 324. 1873. 8vo.
- HUE, F. Aux pays du pétrole. 2^e édition. Paris, 1887. 8vo.
- HUERGO, L. A. Exámen de la propuesta y proyecto del puerto del
Sr. D. Eduardo Madero. Partes 1^a y 2^a. *Tract.* 8vo. vol. 418.
Buenos Aires, 1887. 8vo.
- Examination of the proposal and port project of Edward
Madero. Buenos Aires, 1886. 8vo.
- Ferro-carriles económicos de la república Argentina. *Tract.* 8vo.
vol. 221. Buenos Aires, 1872. 8vo.
- Ferro-carriles económicos para la república Argentina. Serie de
artículos publicados en la Tribuna; y las observaciones de Sr.
Petersson, ingeniero nacional. *Tract.* 8vo. vol. 221.
Buenos Aires, 1872. 8vo.
- HUERNE DE POMMEUSE, —. Des canaux navigables considérés
d'une manière générale, avec des recherches comparatives sur la
navigation intérieure de la France et celle de l'Angleterre.
2 vols. in 1. (Incomplete.) Paris, 1822. 4to.
- HUET, A. Amsterdam en Rotterdam. 2 vols. (Atlas of plates.)
Rotterdam, 1881. 8vo. and 4to.
- Amsterdam een Zeestad. Eene studie over de verbinding van
Amsterdam met den Boven-Rijn, en de droogmaking der
Zuiderzee. *Tract.* 4to. vol. 86. Rotterdam, 1880. 4to.
- Het beproeven van stoomketels. *Tract.* folio. vol. 45.
's Gravenhage, 1888. folio.
- De Berekening van het vermogen van boezem-gemalen, etc.
Tract. folio. vol. 43. 's Gravenhage, 1889. folio.
- Geschiedkundig overzicht van de ontwikkeling van het hooger
technisch onderwijs in ons vaderland. [25-jarig verslag van
het Gezelschap "Leeghwater" te Delft.] *Tract.* 8vo. vol. 508.
[Delft, 1883.] 8vo.
- Geschiedkundig overzicht van de ontwerpen voor de doorgraving
van Holland op zijn smalst, 1629–1885. *Tract.* folio. vol. 45.
's Gravenhage, 1889. folio.
- De Koninklijke Akademie tot opleiding van Burgerlijke
Ingenieurs, de Polytechnische School en de Instelling voor
Onderwijs in de taal-land- en volkenkunde van Ned.-Indië te
Delft. *Tract.* 4to. vol. 111. 1889. 4to.
- Landsaanwinning in de Zuiderzee. *Tract.* 8vo. vol. 486.
Amsterdam, 1890. 8vo.

- HUET, A.—*continued*. Mededeeling over Compound Machines. *Tract. 4to. vol. 110.* 's Gravenhage, 1882. 4to.
- Mededeeling over de bereikbare zuigersnelheid voor dubbel werkende pompen met groote zuighoogte. 's Gravenhage, 1892. 8vo.
- Mededeelingen betreffende hetgeen is ingezonden door verschillende leden van het koninklijk Instituut van Ingenieurs op de Internationale Tentoonstelling te Parijs in 1889. Notice explicative des tableaux et dessins. *Tract. 4to. vol. 113.* 's Gravenhage, 1890. 4to.
- Het nationale vraagstuk de wedstrijd van Amsterdam en Antwerpen. *Tract. 8vo. vol. 484.* Enkhuizen, 1888. 8vo.
- Die nieuwe waterweg von Rotterdam naar zee. *Tract. 4to. vol. 71.* Rotterdam, 1872. 4to.
- De Noordzee voor Amsterdam. Een verzoek aan de Nederlandsche maatschappij ter bevordering van nijverheid. *Tract. 8vo. vol. 162.* Amsterdam, 1867. 8vo.
- Note sur la participation du personnel aux bénéfices de l'entreprise. *Tract. 8vo. vol. 484.* Paris, 1885. 8vo.
- De regeling van het hooger onderwijs en de vorming van ingenieurs en architecten. *Tract. 8vo. vol. 288.* Delft, 1873. 8vo.
- Het rendement van stoomketels. *Tract. folio. vol. 43.* 's Gravenhage, 1888. folio.
- Nadere mededeeling over het rendement van stoomketels, etc. *Tract. folio. vol. 43.* 's Gravenhage, 1889. folio.
- De schadelijke invloed van overmatige hitte in de stookplaten van stoombooten. *Tract. 8vo. vol. 528.* [Amsterdam? 1881.] 8vo.
- Steven Hoogendijk de stichter van het eerste stoomwerktuig in Nederland herdacht door het Bataafsch Genootschap der Proefondervindelijke Wijsbegeerte te Rotterdam 1787–1887. *Tract. 4to. vol. 107.* Rotterdam, 1887. 4to.
- De stoombemaling der Zuiderzee-polders: ontwerp van een stoomgemaal met dubbelwerkende pompen. 's Gravenhage, 1891. 4to.
- De stoombemaling der Zuiderzee-polders: ontwerp van een stoomgemaal met zuigpompen voor de droogmaking van het Hoornsche Hop de Goudzee. (Tweede gedeelte—Bouwkundig ontwerp door G. J. Morre.) 2 pt. *Tract. 4to. vol. 113.* 's Gravenhage, 1890. 4to.
- Stoombemaling van polders en boezems. (Atlas of plates.) 's Gravenhage, 1885. 8vo. and folio.
- Het stuwrad. *Tract. 8vo. vol. 296.* 's Gravenhage, 1887. 8vo.

- HUIET, A.—*continued*. De toenemende grootte der zee-stoombooten. *Tract. 4to. vol. 109.* 's Gravenhage, 1888. 4to.
- De verbeterde inrichting van stellende schepraderen. Mededeeling, etc. *Tract. folio. vol. 43.* 's Gravenhage, 1889. folio.
- De verbeterde inrichting van vijzelgemalen. *Tract. 8vo. vol. 109.* 's Gravenhage, 1888. 4to.
- Voordracht . . . ter toelichting van het voorloopig ontwerp eener open verbinding van Amsterdam met de Noordzee . . . Met zeven platen. 's Gravenhage, 1893. 4to.
- Een voorlezing gehouden in de afdeling "Koophandel," van de maatschappij Felix Meritis. [2nd edition.] *Tract. 8vo. vol. 162.* Amsterdam, 1862. 8vo.
- De water locomotief. *Tract. 8vo. vol. 296.* 's Gravenhage, 1872–76. 8vo.
- De werking van paddle-wielen, etc. *Tract. 8vo. vol. 528* [1891.] 8vo.
- HUIET, A., and BEEKHOUT, J. J. P. T. VAN. Beschrijving van de booten der Stoomvaartmaatschappij "Zeeland," etc. 's Gravenhage, 1891. 4to.
- HUIET, O. Étude d'un réseau de chemins de fer métropolitains pour la ville de Paris. Mission à Londres en mai, 1876. Les chemins de fer métropolitains de Londres. *Tract. 8vo. vol. 304.* Paris, 1878. 8vo.
- HUIET DE BACELLAR PINTO GUEDES, D. The Guns of the ironclad "Riachuelo" and their alteration to the Armstrong system. *Tract. 4to. vol. 97.* Rio de Janeiro, 1885. 4to.
- HUGGINS, S. The course and current of Architecture: being an historical account, etc. Lond. 1863. 8vo.
- HUGGINS, W. The new Star in Auriga. *Tract. 8vo. vol. 518.* [Lond. 1892.] 8vo.
- HUGHES, E. W. M. Report on the working of Steep Gradients. 1888. See SHEPHERD, W., Maj., and HUGHES, E. W. M.
- HUGHES, H. The Water Supply of Middlesex and the Metropolis. *Tract. 8vo. vol. 469.* 1888. 8vo.
- HUGHES, H. W. A text-book of Coal Mining, etc. Lond. 1892. 8vo.
- The thick Coal of South Staffordshire. *Tract. 8vo. vol. 480.* Sheffield, 1885. 8vo.
- HUGHES, J. Concise Tables to facilitate the calculation of Earth-work and Land required in the construction of Railways, etc. Lond. 1846. 12mo.
- On the Pneumatic Method adopted in constructing the foundations of the new bridge across the Medway at Rochester. (Atlas of plates.) 1850. 4to. and folio.

HUGHES, S. London and its Gas Companies, *etc.* *Tract.* 8vo.
vol. 165. *Lond.* 1863. 8vo.

— A Treatise on Gas Works 5th edition, *etc.*
Lond. 1875. 8vo.

— — 7th edition. *Lond.* 1885. 8vo.

— A Treatise on Waterworks for the supply of cities and towns ;
with a description of the principal geological formations of
England as influencing supplies of water, *etc.*

Lond. 1859. 8vo.

— — New edition, enlarged. *Lond.* 1872. 8vo.

HUGHES, T. The English Wire Gauge. *Tract.* 8vo. vol. 331.
Lond. 1879. 8vo.

HUGHES, THOMAS. Description of the method employed for
Draining some Banks of Cuttings on the London and Croydon
and London and Birmingham Railways ; and a part of the retain-
ing wall of the Euston incline, *etc.* *Tract.* 8vo. vol. 500.

(From Min. Proc. Inst. C.E.) *Lond.* 1845. 8vo.

HUGHES, W. C. The American Miller and Millwright's Assistant.
Philadelphia, 1851. 12mo.

— — New edition. *Philadelphia*, 1866. 12mo.

HUGHES, W. G. C. Condensed Mechanics : a selection of formulæ,
rules, *etc.* *Lond.* 1891. 8vo.

HUGON, C. Essai d'une nouvelle méthode d'analyse des trajectoires
et application au tir des canons rayés. *Tract.* 4to. vol. 50.
Paris, 1859. 4to.

HUGUENET, I. Asphaltes et naphtes. Considérations générales
sur l'origine et la formation des bitumes fossiles. 2^e édition.
Paris, 1852. 8vo.

HUGUENIN, P. Aide-mémoire de l'ingénieur. *Paris*, 1887. 8vo.

HUISH, M. Letter to G. C. Glyn, Esq., M.P., on some points of
Railway Management, in reply to a late pamphlet. *Tract.* 8vo.
vol. 82. *Lond.* 1848. 8vo.

— On Deterioration of Railway Plant and road. *Tract.* 8vo. vol. 279.
Lond. 1849. 8vo.

— Railway Accidents : their cause and means of prevention.
Tract. 8vo. vol. 500. (From Min. Proc. Inst. C.E.) *Lond.* 1852. 8vo.

HULL. Report on an Explosion at the Hull Botanic Gardens,
25 Sept., 1882 : by Capt. J. P. Cundill. *Lond.* 1882. folio.

— Royal Infirmary : an account of the opening of the new
North West Wing, and Out-Patients' Department. *Tract.* 8vo.
vol. 412. *Lond.* [1886.] 8vo.

— Minutes of the proceedings of the Waterworks Inquiry Com-
mittee. *Tract.* 8vo. vol. 296. *Hull*, 1874. 8vo.

- HULL—*continued*. Sculcoates Bridge. Plan and sections. J. F. Sharp, Borough Engineer. (4 Maps.) *Hull*, 1872. 8vo.
- HULL, *River*. Act and amended Act for the Improvement of the River Hull. *Lond.* 1801–17. folio.
- Canal from the River Hull to Leven Bridge in Yorkshire. Amended Act. *Lond.* 1805. folio.
- Report of the proceedings of the Committee of Owners of property on both sides of the River Hull. [By E. Gibson and others. *Tract.* 8vo. vol. 71. *Hull*, 1836. 8vo.
- HULL AND DISTRICT INSTITUTION OF ENGINEERS AND NAVAL ARCHITECTS. Transactions. Vols. I.–III. *Hull*, 1886–89. 8vo.
- HULL AND LINCOLN RAILWAY. Minutes of Evidence, Speeches and Proceedings taken before a Select Committee of the House of Commons on the Hull and Lincoln Railway Bill. *Lond.* 1883. folio.
- HULL AND SELBY RAILWAY. Act for making a Railway from Kingston-upon-Hull to Selby. *Lond.* 1836. folio.
- Report. *Tract.* 8vo. vols. 77 and 228. [1836], 1843. 8vo.
- Hull and Selby Railway Bill. Report of the Select Committee of the House of Commons. *Lond.* 1836. folio.
- Railway from Hull to Selby. By a Shareholder. *Tract.* 8vo. vol. 228. *Lond.* 1837. 8vo.
- HULL, BARNSELY, AND WEST RIDING RAILWAY. The proposed new Railway for Hull. Report of proceedings at a town's meeting. *Tract.* 8vo. vol. 302. *Hull*, 1879. 8vo.
- HULL, LINCOLN AND NOTTINGHAM RAILWAY. Prospectus. *Tract.* folio. vol. 49. *Lond.* [1836?] folio.
- HULL SOUTH AND WEST JUNCTION RAILWAY. Hull South and West Junction Railway Bill. Lords and Commons: Minutes of Evidence. *Lond.* 1873. folio.
- HULL, E. Artesian Boring at New Lodge, near Windsor Forest (Berks). *Tract.* 8vo. vol. 535. [*Lond.*] 1894. 8vo.
- The Coalfields of Great Britain . . . With notices of the coalfields of other parts of the world. *Lond.* 1861. 8vo.
- — 3rd edition. *Lond.* 1873. 8vo.
- — 4th edition. *Lond.* 1881. 8vo.
- The Future Water Supply of London. *Tract.* 8vo. vol. 523. (From Quarterly Journal of Science.) *Lond.* 1867. 8vo.
- The Geology of the Leicestershire Coalfield, etc. [*Memoirs of the Geological Survey.*] *Lond.* 1860. 8vo.
- On a proposed Devono-Silurian Formation. *Tract.* 8vo. vol. 474. *Lond.* 1882. 8vo.
- (From the Quarterly Journal of the Geological Society.)

- HULL, E.—*continued*. On the Physical Geology of Tennessee and adjoining districts, *etc.* *Tract.* 8vo. vol. 526. *Lond.* 1891. 8vo.
(From the Quarterly Journal of the Geological Society.)
- On the two British Types of the Lower Cambrian Beds, and the conditions under which they were respectively deposited. *Tract.* 8vo. vol. 454. *Lond.* 1882. 8vo.
- Our Coal Resources. *Tract.* 8vo. vol. 526. [Edinburgh,] 1890. 8vo.
- The Physical Geology and Geography of Ireland. *Lond.* 1878. 8vo.
- A Scheme of Water Supply for villages, hamlets and country parishes of the Central and Eastern Counties. *Tract.* 8vo. vol. 506. *Lond.* 1876. 8vo.
- Sketch of the Geological History of Egypt and the Nile Valley. *Tract.* 8vo. vol. 526. 1890. 8vo.
- A Treatise on the Building and Ornamental Stones of Great Britain and foreign countries, *etc.* *Lond.* 1872. 8vo.
- The Triassic and Permian Rocks of the Midland Counties of England. [*Memoirs of the Geological Survey.*] *Lond.* 1869. 8vo.
- HULL, E., and OTHERS. The Geology of the Burnley Coalfields. [*Memoirs of the Geological Survey.*] *Lond.* 1875. 8vo.
- HULLMANDEL, C. Specimens of a new style of Lithography. *Tract.* 4to. vol. 5. *Lond.* 1829. 4to.
- HULLS, J. A Description and draught of a new invented Machine for carrying vessels or ships out of, or into any harbour, port, or river, against wind and tide, or in a calm. *Tract.* 8vo. vol. 36. *Lond.* 1737. 12mo.
(With MS. copy of specification and notes by Mr. J. Farey.)
- — [Another edition.] *Lond.* 1860. 12mo.
- HULSE, W. Model form of Railway Accounts, submitted to the National Conference of Railway Shareholders, Manchester, April 15, 1868. *Tract.* folio. vol. 11. 1858. folio.
- HÜLSSE, J. A. Die Königliche Polytechnische Schule (Technische Bildungsanstalt) zu Dresden während der ersten 25 Jahre ihres Wirkens. *Tract.* 4to. vol. 109. *Dresden*, 1853. 4to.
- HUMAN, E. Patent Logarithmic Co-ordinate Sheets. *Lond.* 1894. s.sh. folio.
- HUMBER, W. A complete treatise on cast and wrought Iron Bridge construction, including iron foundations, *etc.* 2 vols. *Lond.* 1861. folio.
- A comprehensive treatise on the Water Supply of Cities and Towns, *etc.* *Lond.* 1876. 4to.
- A Handy-book for the Calculation of Strains in Girders. *Lond.* 1868. 8vo.
- — 4th edition. *Lond.* 1885. 8vo.

- HUMBER, W.—*continued*. A practical Treatise on cast and wrought Iron Bridges and Girders, *etc.* Lond. 1857. folio.
- A Record of the Progress of Modern Engineering . . . for the years 1863–[66]. 3 vols. Lond. 1864–68. folio.
- HUMBERT, G. *Traité complet des chemins de fer, etc.* 3 tom. Paris, 1891. 8vo.
- HUMBLE, R. Replies to letters as to his claim to the invention of the Cupola. *Tract. folio. vol. 9.* Darlington, 1870. folio.
- The Revolving Turret. *Tract. folio. vol. 9.* Hartlepool, 1870. folio.
- HUMBLE, W. Dictionary of Geology and Mineralogy . . . 2nd edition, with additions. Lond. 1843. 8vo.
- HUMBLLOT, F., and RENAUD, M. Ville de Paris. Direction des travaux. . . . Notice sur le canal Saint-Denis et la reconstruction de ses écluses. *Tract. 8vo. vol. 477.* Paris, 1889. 8vo.
- HUMBOLDT, A. von, *Baron*. Cosmos: a sketch of a physical description of the Universe. Translated from the German by E. E. Otté and others. 5 vols. Lond. 1851–60. 8vo.
- Cosmos. [A review.] *Tract. 8vo. vol. 130.* Lond. 1848. 8vo.
(From the Edinburgh Review.)
- Views of Nature: or, contemplations on the sublime phenomena of creation; with scientific illustrations. Translated from the German, *etc.* Lond. 1850. 8vo.
- HUME, Rev. A. The Learned Societies and Printing Clubs of the United Kingdom, *etc.* (Supplement.) Lond. 1847, 53. 8vo.
- HUME, A. O. Agricultural Reform in India. *Tract. 8vo. vol. 442.* Lond. 1879. 8vo.
- HUME, D. Life of D. Hume, written by himself; to which is added a letter . . . giving an account of Mr. Hume's death. *Tract. 4to. vol. 20.* 1776. 4to.
- HUMFREY, J. H., *Lieut.-Col.* An Essay on the modern system of Fortification adopted for the defence of the Rhine frontier and on the Continent; exemplified in a copious memoir on the fortress of Coblenz. Lond. 1838. 8vo.
- HUMPHREYS, A. A., *Capt.*, and ABBOT, H. L., *Lieut.* Report upon the Physics and Hydraulics of the Mississippi river; upon the protection of the Alluvial Region against overflow; and upon deepening of the mouths. Washington, 1867. 8vo.
- [Enlarged edition. *Professional Papers of the corps of Engineers, U.S. Army.* No. 13.] Philadelphia, 1876. 4to.
- Physics and Hydraulics of the Mississippi; reply to criticisms made by Dr. Hagen. *Tract. 4to. vol. 514.* New York, 1878. 4to.
- HUMPHREYS, H. T. Description of patent Post and Railway. *Tract. 8vo. vol. 196.* 1870. 8vo.

- HUMPHREYS, J. D. The Electro-Physiology of Man: with practical illustrations of new and efficient modes of Galvanic Treatment, etc. *Lond.* 1843. 8vo.
- HUMPHREYS, W. Supply of Water to London, from the river Thames at Henley; under the management of a metropolitan commission. *Tract. 8vo. vol. 149.* *Lond.* 1849. 8vo.
- HUMPHREYS, N. H. The Chemistry of Illuminating Gas. *Lond.* 1891. 8vo.
- HUNAEUS, G. C. K. Die geometrischen Instrumente der gesammten praktischen Geometrie, deren Theorie, Beschreibung, und Gebrauch, etc. *Hannover*, 1864. 8vo.
- HUNGARIAN SOCIETY OF ENGINEERS. A Magyar Mérnök—és Építész—Egylet Közlönye. Vol. 1, (2, etc.) *Budapest*, 1867, etc. 4to.
- HUNGARY. Commission composée des ingénieurs étrangers invités à examiner les travaux de régularisation exécutés sur les rivières hongroises. Rapports. (Atlas of plates.) *Budapest*, 1879. 8vo.
- Mission de Hongrie en 1879. Rapport sur la Tisza et ses affluents. [MS.] *Tract. folio. vol. 30.* *Budapest*, 1879. folio.
- [Railways.] Inhalts-Verzeichniss zum Bedingnissheft zur Vergabung von Linien gegen Pauschsummen. (Atlases of plates. 4 vols.) [*Pest*, 1868–78?] 4to. and folio.
- HUNGERFORD AND WELLINGTON STREET VIADUCT. Reports from the select Committee; proceedings of the Committee, minutes of evidence, and appendix. *Lond.* 1869. folio.
- HUNT, A. E. About some of the properties of Steel. *Tract. 8vo. vol. 466.* [*Philadelphia*,] 1883. 8vo.
- Aluminum; its manufacture and uses from an engineering standpoint. *Tract. 8vo. vol. 530.* *Philadelphia*, 1892. 8vo.
(From the Journal of the Franklin Institute.)
- The estimation of Manganese in Iron and Steel by the Colour-Method. *Tract. 8vo. vol. 530.* *New York*, 1886. 8vo.
- Hydraulic Cements. *Tract 8vo. vol. 507.* [1891.] 8vo.
- On the inspection of Materials of Construction. 1890. See CLAPP, G. H., and HUNT, A. E.
- On the Testing of Metal, and testing machinery, etc. *Tract. 8vo. vol. 507.* [*Pittsburg*,] 1889. 8vo.
- Pittsburg Testing Laboratory Specifications for material and workmanship of structures of Iron and Steel. *Tract. 8vo. vol. 421.* 1885. 8vo.
- The Properties, uses, and processes of Production of Aluminum. *Tract. 8vo. vol. 530.* [*Boston*, 1891.] 8vo.
- Stone used for structural purposes in Alleghany County. *Tract. 8vo. vol. 507.* *Pittsburg*, 1889. 8vo.

- HUNT, A. E.—*continued*. The Tests and Requirements of Structural Wrought-Iron and Steel. *Tract 8vo. vol. 507.*
New York, 1891. 8vo.
- HUNT, A. E., and OTHERS. The chemical analysis of Aluminum. *Tract. 8vo. vol. 530.* 1892. 8vo.
- The Properties of Aluminum: with some information relating to the metal. *Tract 8vo. vol. 530.* New York, 1890. 8vo.
- HUNT, A. R. Denudation and deposition by the agency of Sea-waves, experimentally considered, *etc.* *Tract. 8vo. vol. 481.*
Torquay, 1889. 8vo.
- The Evidence of the Skerries Shoal on the wearing of fine Sands by Waves. *Tract. 8vo. vol. 481.* 1887. 8vo.
- Notes on the Submarine Geology of the English Channel, off the coast of South Devon. 2 parts. *Tract. 8vo. vol. 474.*
1881. 8vo.
- Notes on Torbay. *Tract. 8vo. vol. 462.* 1878. 8vo.
- On a block of Granite from the Salcombe Fishing Grounds. *Tract. 8vo. vol. 474.* 1876. 8vo.
- On the Action of Waves on Sea-beaches and Sea-bottoms. *Tract. 8vo. vol. 481.* [Dublin,] 1884. 8vo.
(Reprinted from "The Scientific Proceedings of the Royal Dublin Society.")
- The Action of Waves on Sea-beaches and Sea-bottoms; being a lecture, *etc.* *Tract. 8vo. vol. 481.* Torquay, 1887. 8vo.
- The Raised Beach on the Thatcher Rock; its Shells and their teaching. *Tract. 8vo. vol. 481.* [Torquay?] 1888. 8vo.
- HUNT, C. Plans and Description of the extensions at the Windsor Street Gas-works of the Birmingham Corporation.
Lond. 1886. 4to.
- HUNT, R. British Mining; a treatise, *etc.* Lond. 1884. 8vo.
- Mining Records. Mineral Statistics of the United Kingdom of Great Britain and Ireland for the years 1853-78. By R. Hunt. 11 vols. [Memoirs of the Geol. Survey.] Lond. 1855-82. 8vo.
- On the importance of cultivating habits of Observation. *Tract. 8vo. vol. 100.* Lond. 1851. 8vo.
- Researches on Light in its chemical relations. 2nd edition. Lond. 1854. 8vo.
- The rise and progress of Steam-Cultivation at the Watling works, Stony Stratford, Bucks. *Tract. 8vo. vol. 153.*
Birmingham, 1863. 8vo.
- Thermography: or, the art of copying engravings, or any printed characters from paper or metal plates; and on the recent discovery of Moser, relative to the formation of images in the dark. *Tract. 8vo. vol. 80.* Falmouth, 1842. 8vo.
- See URE, A. Dictionary of Arts, Manufactures, *etc.* 7th edition. Supplement by R. Hunt. 1875.

- HUNT, T. Unity of the Iron Network : showing how the last argument of the break of gauge competition is at variance with the true interests of the public. *Tract. 8vo. vols. 70 and 461.*
Lond. 1846. 8vo.
- HUNT, T. F. Exemplars of Tudor Architecture, adapted to modern habitations . . . and observations on the furniture of the Tudor period.
Lond. 1841. 4to.
- HUNT, T. S. Coal and Iron in Southern Ohio. The Mineral Resources of the Hocking Valley. *Tract. 4to. vol. 324.*
Boston, 1881. 8vo.
- Notes on Iron and Iron Ores. *Montreal, 1870. 8vo.*
 (From the Reports of the Geological Survey of Canada.)
- On the Laurentian Limestones of North America. *Tract. 8vo. vol. 390.*
Albany, 1871. 8vo.
- HUNT, W. P. The Construction of Heavy Ordnance ; a plea for the thorough and crucial test of American Cast-Iron by the construction and proof of rifled guns of large calibre.
Boston, 1881. 4to.
- HUNTER, G. M. On Ailsa Craig Lighthouse Oil-gas work and Fog-signal machinery. *Tract. 8vo. vol. 446. Glasgow, 1887. 8vo.*
- On the Santa Isabel Nitrate Works, Toco, Chile, etc. *Tract. 8vo. vol. 525. Glasgow, 1892. 8vo.*
- HUNTER, J. Reports, documents, and testimonials, relative to his patent Stone Planing machine, etc. *Tract. 8vo. vol. 22.*
Lond. 1836. 8vo.
- HUNTER, R. The Encyclopædic Dictionary ; a new and original work of reference to all the words in the English language, etc. 7 vols.
Lond. 1885–88. 8vo.
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Bristol, 1891. 8vo.
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Lond. 1779. 8vo.
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New York, 1880. 4to.
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Lond. 1889. 8vo.
- HUNTER, Sir W. W. The Imperial Gazetteer of India. 9 vols.
Lond. 1881. 8vo.
- HUNTER, River, N.S.W. Report from the Hydraulic Engineer on the floods in the Hunter River.
Sydney, 1877. folio.
- Report of Mr. G. Gordon on Floods in the Hunter River.
Sydney, 1890. folio.
- Report . . . relating to the proposed Bridge over the Hunter River at Jerry's Plains.
Sydney, 1890. folio.

- HUNTINGTON, J. B. Tables and rules for facilitating the calculation of earthwork, land, curves, distances, and gradients, required in the formation of Railways, Roads, and Canals ; also, essays on the prismoidal formula, and on the power required upon inclined planes. *Lond.* 1846. 8vo.
- — 2nd edition. *Lond.* 1847. 8vo.
- HUPFELD, W. Die Concurrenz-Fähigkeit der Ost-Eisenindustrie. *Tract.* 8vo. vol. 255. *Klagenfurt*, 1875. 8vo.
- HURON, Lake. Report on the north shore of Lake Huron. 8vo. [*Geol. Survey of Canada.*] *Montreal*, 1849. 8vo.
- HURST, J. T. Handbook of Formulæ, tables and memoranda for architectural students. *Lond.* 1882. 12mo.
- Spon's Tables and Memoranda for Engineers. 7th edition. *Lond.* 1885. 8vo.
- HURTZIG, A. C. On some Tidal and Engineering Features of the Humber : a lecture, etc. *Lond.* 1884. 8vo.
- HUSS, L. Der Bau des Moldau-Viaductes bei Cervená. *Tract.* folio. vol. 45. *Wien*, 1889. folio.
- Mittheilungen über die grossen gewölbten Brücken der k. k. Staatsbahn Stanislaw-Woronienka. *Tract.* 4to. vol. 120. *Wien*, 1893. 4to.
- Die Verstärkung eiserner Brücken in Oesterreich. *Tract.* folio. vol. 44. *Wien*, 1889. folio.
- HUTCHINGS, W. M. The Colliery Manager's Pocket-book . . . for 1876. *Lond.* 1876. 8vo.
- HUTCHINS, G. A. Papers relating to the proposed Irrigation Canal from the Rio Cobre. *Tract.* 8vo. vol. 231. *Jamaica*, 1872. 8vo.
- HUTCHINSON, C. S., Major-Gen. Reports on the Forth Bridge. See FORTH BRIDGE.
- HUTCHINSON, E. Girder-making and the practice of Bridge-building in wrought iron. *Lond.* 1879. 8vo.
- HUTCHINSON, F. B. Anniversary Address delivered to the Members of the Wellington Philosophical Society, as President, etc. *Tract.* 8vo. vol. 445. *Wellington*, 1887. 8vo.
- HUTCHINSON, H. A Treatise on the practical Drainage of Land. *Lond.* 1844. 8vo.
- HUTCHINSON, H. D. Military Sketching made easy, and Military Maps explained. *Chatham*, 1886. 8vo.
- HUTCHINSON, S. [Steam Cultivation ; Smith v. Fowler.] The Comparative Statement, with the correspondence between Mr. Hutchinson and Mr. R. T. Smith ; and various letters on the subject reprinted from the agricultural newspapers, etc. *Tract.* 8vo. vol. 153. *Leeds*, 1865. 8vo.

- HUTCHINSON, W. E. The Steering of Screw Steamers. [*Papers of the Shipmasters' Soc.*, No. 6.] *Lond.* 1890. 8vo.
- HUTCHISON, G. A treatise on the causes and principles of Meteorological Phenomena. Also, two essays: the one on Marsh Fevers; the other on the system of equality, proposed by Mr. Owen, of New Lanark, for ameliorating the condition of mankind. *Glasgow*, 1835. 8vo.
- HUTTON, C. A course of Mathematics, designed for the use of the gentlemen cadets in the Royal Military College at Woolwich. 4th edition. 2 vols. *Lond.* 1803–04. 8vo.
- — — New edition. 1833. 8vo.
- The Force of Fired Gunpowder, and the initial velocities of cannon balls, determined by experiments. *Tract.* 4to. vol. 20. (From the *Phil. Trans.*) *Lond.* 1778. 4to.
- A letter to the Marquis de Laplace on several Astronomical and Philosophical subjects. *Tract.* 8vo. vol. 26. (From the *Phil. Mag.*) *Lond.* 1820. 8vo.
- Mathematical tables; containing the common, hyperbolic, and logistic logarithms, also sines, tangents, secants, and versed sines, both natural and logarithmic . . . with a history of the discoveries and writings relating to those subjects. . . . 5th edition. *Lond.* 1811. 8vo.
- A Philosophical and Mathematical Dictionary. New edition. 2 vols. *Lond.* 1815. 4to.
- The Principles of Bridges; containing the mathematical demonstrations of the properties of the arches, the thickness of the piers, the force of the water against them, *etc.* 2nd edition. *Tract.* 8vo. vol. 14. *Lond.* 1801. 8vo.
- Tracts on mathematical and philosophical subjects; comprising the theory of bridges, experiments on the force of gunpowder, with application to the modern practice of artillery, *etc.* 3 vols. *Lond.* 1812. 8vo.
- A Treatise on Mensuration. *Newcastle-upon-Tyne*, 1770. 4to.
- See ROYAL SOCIETY. The Philosophical Transactions . . . Abridged . . . by C. Hutton, *etc.*, 1809.
- HUTTON, F. R. Report on Machine Tools and Wood-working Machinery. *Washington*, 1885. 4to.
- Report on Machine Tools and Wood-working Machinery. [*U.S.A.*, 10th Census. Vol. 22.] *Washington*, 1888. 4to.
- Report on Steam-Pumps and Pumping-Engines. [*U.S.A.*, 10th Census. Vol. 22.] *Washington*, 1888. 4to.
- HUTTON, F. W., Capt. Geological Report on the Lower Waikato District. *Tract.* 8vo. vol. 360. *Wellington*, 1867. 8vo.

- HUTTON, W. R. The Washington Bridge over the Harlem River, at 181st Street, New York City : a description of its construction. *New York*, 1890. 4to.
- HUTTON, W. S. The Practical Engineer's Handbook, *etc.* *Lond.* 1887. 8vo.
- Steam-Boiler Construction : a practical handbook, *etc.* *Lond.* 1891. 8vo.
- The Works Manager's Handbook of modern rules, tables, and data for civil engineers, *etc.* *Lond.* 1855. 8vo.
- — 4th edition. *Lond.* 1890. 8vo.
- HUXLEY, T. H. Physiography : an introduction to the study of Nature. *Lond.* 1879. 8vo.
- — [Another edition.] *Lond.* 1890. 8vo.
- HUYGENS, C. The Celestial Worlds discovered ; or, conjectures concerning the inhabitants, plants, and productions of the worlds in the planets. *Lond.* 1722. 12mo.
- HUYSHE, G. L., *Capt.* The Red River Expedition. *Lond.* 1871. 8vo.
- HUYTON-WITH-ROBY. Report on the Sewerage of the township of Huyton-with-Roby. *Tract.* 8vo. vol. 247. *Prescot*, 1875. 8vo.
- HYATT, T. Account of some experiments with Portland-Cement-Concrete combined with Iron as a building material. *Lond.* 1877. 4to.
- HYDE, E. W. Skew Arches ; advantages and disadvantages of different methods of construction. *New York*, 1875. 12mo.
- HYDE, G. W., and SMITH, W. J. Results of experiments made to determine the permeability of Cements and Cement Mortars, *etc.* *Tract.* 8vo. vol. 507. 1889. 8vo.
- HYDE COLLIERY. Report on an Explosion which occurred on the 18th January, 1889. By W. N. Atkinson. *Lond.* 1889. folio.
- HYETT, W. On the Absorption of Liquid Solutions by growing Timber. *Tract.* 8vo. vol. 61. *Edinburgh*, 1842. 8vo.
- HYMERS, J. The elements of the Theory of Astronomy. 2nd edition. *Cambridge*, 1840. 8vo.
- A Treatise on Analytical Geometry of three dimensions, containing the theory of curve surfaces, and of curves of double curvature. 2nd edition, *etc.* *Cambridge*, 1836. 8vo.
- — 3rd edition. *Cambridge*, 1848. 8vo.
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3rd edition. Cambridge, 1847. 8vo.
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Cambridge, 1835. 8vo.
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Cambridge, 1840. 8vo.
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Lond. 1876. 8vo.

I.

- IBBETSON, D. I. H. Practical Rules for ascertaining the relations between Alterations in Gradients and the corresponding changes in contents. *Lond.* 1847. 8vo.
- ICERY, E. Recherches sur le jus de la canne à sucre. *Tract.* 8vo. vol. 240. *Paris*, 1865. 8vo.
- ICK, Rev. T. E. A Lecture on Wonders of Coral Life, etc. *Tract.* 8vo. vol. 473. *Ballaarat*, 1882. 8vo.
- IDDINGS, J. P. On a Group of Volcanic Rocks from the Tewan Mountains, New Mexico, and on the occurrence of Primary Quartz in certain Basalts. [*U.S. Geol. Survey. Bulletin No. 66.*] *Washington*, 1890. 8vo.
- On the Development of Crystallization in Igneous Rocks, etc. 1885. See HAGUE, A., and IDDINGS, J. P.
- IFFLEY LOCK. Thames Valley Drainage. Reports and letters on the removal of Iffley Lock. *Tract.* 8vo. vol. 407. *Oxford*, 1885. 8vo.
- IGNATIUS, K. E. F. Exposition Universelle de 1878 à Paris. Le Grand-Duché de Finlande. Notice statistique. *Tract.* 8vo. vol. 311. *Helsingfors*, 1878. 8vo.
- IHLSENG, M. C. A Manual of Mining, etc. *New York*, 1892. 8vo.
- ILLINOIS CENTRAL RAILROAD. Report and accompanying documents. *Tract.* 4to. vol. 81. *New York*, 1856. 4to.
- ILLINOIS MINING INSTITUTE. Journal. Vol. 1, etc. *Springfield, Ill.*, 1893, etc. 8vo.
- IMBER. Manor or lordship of Imber, otherwise Imworth. Copy parcels in Mr. Corbett's conveyance. Dated 21st April, 1862. (Lower Thames Valley main sewerage.) MSS. 1862. folio.
- IMISON, J. A Treatise of the Mechanical Powers . . . To which are added several useful improvements in Mill Work, Bevel Geer, Friction, the best shape for Teeth in Wheels, etc. *Tract.* 8vo. vol. 281. *Lond.* [1787.] 8vo.
- IMPERATORI, L. Chemins de fer de la haute Italie. Essais à la traction sur la fabrication de l'acier Bessemer et leur application à la mesure de la ténacité et ductilité des métaux. *Tract.* folio. vol. 28. *Milan*, 1878. folio.
- IMPERIAL INSTITUTE. Annual Report for 1893. *Lond.* 1893. 8vo.

IMPERIAL INSTITUTE—*continued*. [Description and plans of the Imperial Institute of the United Kingdom, the Colonies, and India. *Tract*. 8vo. vol. *Lond*. 1892. 8vo.

— Report of Progress . . . to the 26th November, 1892, *etc*.
Lond. 1892, *etc*. 8vo.

— Year Book. *Lond*. 1892, *etc*. 8vo.

IMPERIALE REGIO ISTITUTO LOMBARDO-VENETO. *See*
REALE ISTITUTO LOMBARDO.

IMRAY, J., and BIGGS, C. H. W. First Principles of Mechanical Engineering. *Lond*. [1892.] 8vo.

IMROTH, —, and ROESSLER, H. The Ports of Inland Navigation of the basin of the Rhine. [5th Int. Congr. Inl. Nav.] [*Paris*, 1892.] 8vo.

INCORPORATED ASSOCIATION OF MUNICIPAL AND COUNTY ENGINEERS. [Formerly the ASSOCIATION OF MUNICIPAL AND SANITARY ENGINEERS.] Proceedings . . . Edited by T. Cole. *Lond*. 1875, *etc*. 8vo.

INCORPORATED GAS INSTITUTE. [Formerly (1869–81) the BRITISH ASSOCIATION OF GAS MANAGERS, and (1882–89) the GAS INSTITUTE.] Report of Proceedings of the British Association of Gas Engineers. 13 vols. *Lond*. 1869–81. 8vo.

— Transactions (Reports) of the Gas Institute. 8 vols.
Lond. 1882–89. 8vo.

— Transactions (Reports) of the Incorporated Gas Institute.
Lond. 1891, *etc*. 8vo.

— International Electric and Gas Exhibition at the Crystal Palace, 1881–2. Report on the Gas section by the Committee appointed by the Gas Institute. 2 vols. *Lond*. 1884. 8vo.

INCORPORATED INSTITUTION OF GAS ENGINEERS.
Transactions. Vol. 1, *etc*. Edited by T. Cole.
Lond. 1892, *etc*. 8vo.

INCORPORATED LAW SOCIETY. Calendar and Supplement for 1883, (1888 and 1891.) 3 vols. *Lond*. 1883–91. 8vo.

— Catalogue of the printed books in the library of the Incorporated Law Society. By F. Boase. *Lond*. 1891. 8vo.

INDIA, *including* FARTHER INDIA *and* CEYLON.

[Under this heading are included Official Papers and Reports, and Anonymous Works relating to India. Non-official works by specified authors are entered under the authors' names.]

— Allen's Improved Map of India, compiled from the latest documents, *etc*. *Lond*. 1842. 8vo.

— [Administration.] General Report on the Administration of the several Presidencies and Provinces of British India, during 1857–58. Part 2. *Calcutta*, 1859. 4to.

- INDIA.—[*Administration*].—*continued*. Minute by the Governor General: [a brief review of the period of Lord Dalhousie's administration, 1848-56. [*Records of the Govt. of India (Home Dep.)* No. 14.] *Calcutta*, 1856. 8vo.
- [*Agriculture*.] Correspondence relating to the Deterioration of Lands from the presence in the soil of Reh. [*Records of the Govt. of India (P.W.D.)* No. 41.] *Calcutta*, 1864. 8vo.
- Extract from the Proceedings of the Government of India, in the Revenue and Agricultural Department [relative to grants of water-power from canals]. *Calcutta*, 1882. folio.
- [*Archæology*.] Archæological Survey of India. Four Reports made during . . . 1862-65, by A. Cunningham. 2 vols. *Simla*, 1871. 8vo.
- See also infra* :—[*Public Service Commission*.] Proceedings of Sub-Committee. Vol. 3. 1887.
- [*Army*.] Royal Commission on the Sanitary State of the Army in India. Report of the Commissioners. 2 vols. *Lond.* 1863. folio.
- [*Canals*.] A brief history of the Calcutta Eastern Canals and the new Chitpore Lock. *Calcutta*, 1883. folio.
- Correspondence regarding collection of Canal Revenue, by the Land Revenue Authorities. [*Calcutta?*] 1861. folio.
- Note on the design of the Coast Canal Locks. [1882.] folio.
- Slope Tables for the use of the Canal Department, *etc.* *Umballa*, 1851. 8vo.
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- [*Census*.] Memorandum on the Census of British India of 1871-72. *Lond.* 1875. folio.
- [*Civil Service*.] Index to the Report from the Select Committee on East India (Civil Service). *Lond.* 1890. folio.
- Report from the Select Committee on East India Civil Servants, *etc.* *Lond.* 1890. folio.
- Return of Correspondence . . . in relation to the Resolution of the Government of India . . . regarding the Uncovenanted Service. *Lond.* 1892. folio.
- [*Coal*.] Handbooks of Commercial Products. Indian Section. No. 9. Indian Coal. [*Imperial Institute Series*.] *Calcutta*, 1893. 8vo.
- Reports on the Coal Resources and production of India. [*Records of the Govt. of India (Home Dep.)* No. 64.] *Calcutta*, 1868. 8vo.
- Reports on Coal-Mining in India. 1869. folio.
- [*Communications*.] Report from the Select Committee on Steam Communication with India, *etc.* *Lond.* 1837. folio.

- INDIA.—[*Communications*].—*continued*. Report of the Committee
Steam Communication with India *viâ* the Red Sea, *etc.* .
Lond. 1839. f
- Report from the Select Committee on Steam Navigation
India, *etc.* Lond. 1834. f
- Report of a meeting, held 13th January, 1839, at the Lor
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October, 1838, on Steam Communication with India *viâ* the
Sea. *Tract. 8vo. vol. 163.* Lond. 1839.
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Public Works Department. [Simla, 1877.] f

- INDIA.—[*Engineers*].—*continued*. Particulars respecting the competitive Examination of Candidates for Junior Appointments in the Engineer Establishment, *etc.* [With Examination Papers.]
Lond. 1868. folio.
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- Return on the excess of supply of Civil Engineers for India.
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- Returns of names of Examiners . . . Successful Candidates . . . and Examination Papers. (Civil Engineers' Examinations) 1859, (1860–69.) Lond. 1859–69. folio.
- See INSTITUTION OF CIVIL ENGINEERS. Return of Correspondence relating to . . . the relative position of Civil and Military Engineers in the Public Works Department. 1892.
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Lond. 1881–85. folio.
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- [*Geological Survey.*] Annual Reports, 1858–59 and 1863–67.
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- Contents and Index of the first twenty volumes, 1859 to 1883: by W. Theobald. Calcutta, 1892. 8vo.
- Palæontologia Indica: being figures and descriptions of the organic remains procured during the progress of the Survey, *etc.*
(Imperfect.) Calcutta, 1861, *etc.* folio.

- INDIA.—[*Geological Survey*]*—continued.* Records: edited by T. Oldham. Vol. 1, *etc.* Calcutta, 1870, *etc.* 8vo.
- — Index to the first twenty volumes, 1868 to 1887. Calcutta, 1891. 8vo.
- [Geology.] Geological Papers on Western India . . . to which is appended a summary of the Geology of India generally: edited by H. J. Carter, *etc.* Bombay, 1857. 8vo.
- See also *infra*:—[*Public Service Commission.*] Proceedings of Sub-Committee. Vol. 3. 1887.
- [Hemp.] Papers regarding the Cultivation of Hemp in India. Tract. 8vo. vol. 473. Agra, 1855. 8vo.
- [Iron.] Handbooks of Commercial Products. Indian Section, No. 8. Iron; Southern Districts, Madras Presidency. [*Imperial Institute Series.*] Calcutta, 1892. 8vo.
- [Irrigation.] Canals of Irrigation in India. Cambridge, 1853. 8vo.
- [A collection of Official Papers relating to Irrigation Works in India.] Lond. 1861-70. folio.
- Note on the Measures to be adopted for the Extension of Irrigation Works in India, by aid of special loans, *etc.* Calcutta, 1865. folio.
- Papers relating to the System of periodical Measurements of Irrigated Lands, and the distribution and economy of Water. [*Selections from Records of Bombay Govt. No. 89.*] Bombay, 1865. 8vo.
- A statistical Review of the Irrigation Works of India, 1887-88. Calcutta, 1889. 8vo.
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- Despatches on the Organization of the Meteorological Department in India, 1871-73. Lond. 1874. folio.
- Indian Meteorological Memoirs; being occasional discussions and compilations of meteorological data . . . Published under the direction of H. F. Blanford. (Continued after Vol. 3 by J. Eliot.) Calcutta, 1876, *etc.* 4to.
- Meteorological Observations recorded at six stations in India in the year 1880 (1881-88), under the direction of H. F. Blanford. 2 vols. Calcutta, 1881-89. folio.

INDIA.—[*Meteorology*].—*continued*. Meteorological Observations recorded at seven stations in India in the year 1891 (1892, etc.), under the direction of J. Eliot. *Calcutta*, 1892, etc. folio.

— Report on Meteorology in India, 1876–1890; by H. F. Blanford: [after 1885 by J. Eliot.] 15 vols.

Calcutta, 1878–92. 4to.

[Continued as:]

— The India Weather Review, for the year 1891, (1892, etc.). By J. Eliot. *Calcutta*, 1892, etc. 4to.

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Calcutta, 1883, etc. 4to.

— See also:—[*Cyclones*] and [*Public Service Commission*]. Proceedings of Sub-Committee. Vol. 3. 1887.

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Boorkee, 1887. 8vo.

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Lond. 1893. folio.

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Lond. 1870, etc. folio.

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6. Lower Provinces of Bengal (including Assam).

— Proceedings of the Sub-committee. 3 vols. *Calcutta*, 1887. folio.

Vol. 1. Accounts Dept., India.

2. Mint Dept., *Calcutta* and Bombay.

3. Meteorological Dept.—Geological Dept.—Archæological Dept.

— Report on the Public Service Commission, 1886–87.

Lond. 1887. folio.

— [*Public Works Department*]. Annual Report of Progress and Expenditure for 1860–61.

Calcutta, 1862. folio.

— Annual Progress Report of Public Works in India, 1864–65.

[*Calcutta*, 1866.] folio.

— Progress Reports of the Public Works Department, for 1854–55.

[*Records of the Government of India (P.W.D.)* No. 13.]

Calcutta, 1856. 8vo.

— Code of Regulations for the Public Works Department, under the Local Governments of Bengal, the N.W. Provinces, and the Punjab. (Appendix.) 2 vols.

Calcutta, 1858, 60. 8vo.

— — 3rd edition.

Calcutta, 1870. 8vo.

- INDIA.—[*Public Works Department*].—*continued*. Forms to the Code of Regulations for the Public Works Department, *etc.* Parts 1 and 3. *Calcutta*, 1859. folio.
- India Reform. No. 8. Public Works. *Tract*. 8vo. vol. 115. *Lond.* 1853. 8vo.
- Report from the Select Committee on East India (Public Works), *etc.* *Lond.* 1878. folio.
- Report of Proceedings at the Conference held at Poona, 1865. *Bombay*, 1866. folio.
- Standing Orders of the Public Works Department, issued during 1866–67. *Calcutta*, 1868. 8vo.
- A set of Forms to accompany the Standing Orders of the Public Works Department, compiled by Lieut.-Col. J. T. Boileau. *Roorkee*, 1852. folio.
- *See also* :—[*Engineers*.]
- [Railways.] Administration Report on Indian State Railways, from the commencement to the end of 1879–80 (1881–82, *etc.*). *Calcutta*, 1881, *etc.* folio.
- Assisted Railways constructed and in progress on 31st March, 1884. [*Simla*,] 1884. folio.
- A Bill to empower the Secretary of State in Council of India to raise money in the United Kingdom for the purchase of the Oude and Rohilkund Railway, and for the construction, extension, and equipment of Railways in India, *etc.* *Lond.* 1888. folio.
- The Break of Gauge in India : a plea for preserving unbroken the last link in the great main railway system of India. *Tract*. 8vo. vol. 238. *Lond.* 1873. 8vo.
- Classified list of the Indian Railways, with their Gauges and Lengths, *etc.* 1883. 8vo.
- Contract, (Contract No. 2) between the Honorable East India Company and the East Indian Railway Company for the construction of an experimental line of railway from Calcutta towards the Upper Provinces of India (and to Delhi). *Calcutta*, 1849, 54. folio.
- The Control of Indian Railways [Signed : V.]. *Tract*. 8vo. vol. 404. *Lond.* 1885. 8vo.
- Copies of Correspondence received from the Governor-General relative to Railway Undertakings. *Lond.* 1853. folio.
- Copies of Correspondence . . . relative to Railway Extensions in India . . . and of a Report by Mr. J. Fowler . . . on the question of the most suitable Gauge for Narrow Gauge Railways in India. *Lond.* 1871. folio.
- Copy of all contracts or agreements entered into by the Secretary of State for India since April 8th, 1859, with any company for the Construction of Railways in India. *Lond.* 1871. folio.

- INDIA.—[*Railways*].—*continued*. Correspondence . . . respecting the proposed Break of Gauge on the . . . Railway to Peshawur, *etc.*
Lond. 1874. folio.
- Despatch . . . on the subject of Railway Extension in India.
Lond. 1869. folio.
- East Indian Railway and Guaranteed Railways constructed and in progress on 31st March, 1884. [*Simla,*] 1884. folio.
- East Indian Railway and Imperial State Railways constructed and in progress on 31st December, 1881, (1882.)
 [*Calcutta,*] 1882-83. folio.
- Further papers relating to the extension of Railway Communication in India. (Supplement and Atlas.) 5 vols.
Lond. 1868-69. folio.
- General Rules, with an abstract of the Indian Railway Act, 1879.
Calcutta, 1880. 8vo.
- Guaranteed Railways . . . constructed and in progress on 31st December, 1881 (1882, March 31st, 1884).
 [*Calcutta, Simla,*] 1882-84. folio.
- Non-guaranteed Railways, constructed and in progress on 31st December, 1882.
 [*Calcutta,*] 1882. folio.
- Indian State Railways. Contract for iron underframes and bodies for iron low-sided Ballast Wagons. 1884. folio.
- Indian State Railways. Contract (Specification) for . . . iron underframes, bogie trucks, and ironwork for underframes and bodies for iron bogie wagons, 25 feet long. 1883. folio.
- Indian State Railways. Contracts for Ironwork for bridges, ironwork for roofing, iron roofing for sheds, Bessemer steel double-headed rails, *etc.* 1889-7. folio.
- Lengths open, average Age and general Results of Working, for the 5 years 1876-80.
Lond. 1882. folio.
- A letter to the Right Hon. Lord J. Russell, M.P., on the subject of Indian Railways. By an East India Merchant. *Tract.* 8vo. vol. 82.
Lond. 1848. 8vo.
- A Letter to the Shareholders of the East Indian and Great Western of Bengal Railways on their present position and future prospects. By One of Themselves. *Tract.* 8vo. vol. 228.
Lond. 1847. 8vo.
- Map of the East Indian Railway . . . to accompany the Report of the Managing Director.
Calcutta, 1846. 4to.
- Our Indian Railways. *Tract.* 8vo. vol. 77.
 [*Calcutta,* 1845?] 8vo.
- (From the *Calcutta Review*.)
- Preliminary and Administration Report, Pts. 1 and 2.
Simla, 1884. folio.

- INDIA.—[*Railways*].—*continued*. Proceedings of the Committee of Locomotive and Carriage Superintendents for India. 1889, (1890, *etc.*) *Simla*, 1890, *etc.* folio.
- Railways in India: their present state and prospects. *Tract*. 8vo. vol. 260. *Lond.* 1855. 8vo.
- Relative merits of Broad and Metre Gauge Lines of Railway. [*Selections from Records of the Govt. of India (P.W.D.)* Serial No. 13.] *Calcutta*, 1888. folio.
- Report from the Select Committee on East India Railway Communication, *etc.* *Lond.* 1884. folio.
- — Index to the Report on East India Railway Communication. *Lond.* 1884. folio.
- Report of the Commissioners appointed to inquire into the question of the practicability of establishing Railway Communication throughout India. *Lond.* 1846. folio.
- Report of the Committee appointed . . . May 1st, 1880, for the revision of the Statistics of Indian Railways. *Simla*, 1880. folio.
- Report of the opening of the East Indian Railway. *Tract*. 8vo. vol. 179. *Calcutta*, 1855. 8vo.
- Report on the Gauge of State Railways in India: by G. L. Molesworth. *Simla*, 1873. folio.
- Report to the Secretary of State for India . . . on Railways in India, for 1859—1882—3. *Lond.* 1860—83. folio.
- Special Report from the Select Committee on the East Indian Railway Bill, *etc.* *Lond.* 1879. folio.
- State Railways, Imperial, constructed and in progress on 31st March, 1884. [*Simla*,] 1884. folio.
- State Railways in Native States constructed and in progress on 31st December, 1882 (31st March, 1884). [*Calcutta, Simla*,] 1883—84. folio.
- State Railways (provincial) constructed and in progress on 31st December, 1881 (1882, 31st March, 1884). [*Calcutta, Simla*,] 1882—84. folio.
- The Viceroy of India and Sir Bartle Frere on the Indus Railway. *Tract*. 8vo. vol. 158. *Lond.* 1867. 8vo.
- See also *infra*:—PUNJAB.—[*Railways*.] East India Railway Gauge *etc.* 1874.
- [*Rainfall*.] Letter on the subject of Rainfall, with Rainfall Diagrams and Tables: by A. R. Binnie. *Nagpúr*, 1873. folio.
- Rainfall of India, 1891 (1892, *etc.*). *Calcutta*, 1892, *etc.* folio.
- Return of the Rainfall in India during the year 1878, as compared with the average rainfall. *Lond.* 1880. folio.
- [*Revenue*.] See *supra*:—[*Finance and Revenue*.]
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- INDIA.—[*Rivers*].—*continued*. Précis of reports, opinions, and observations on the Navigation of the rivers of India by Steam Vessels. *Tract*. 8vo. vol. Lond. 1831. 8vo.
- [*Roads*.] Report on the Communication between Calcutta and Dacca: by W. H. Greathed. [*Records of the Govt. of India* (P.W.D.) No. 19.] Calcutta, 1856. 8vo.
- Report on the . . . Hindostan and Thibet Road: by Capt. D. Briggs. [*Records of the Govt. of India* (P.W.D.) No. 16.] Calcutta, 1856. 8vo.
- Report on the Road from Dacca to Arracan: by G. Sims. [*Records of the Govt. of India* (P.W.D.) No. 19.] Calcutta, 1856. 8vo.
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INDIA.—[*Surveys*].—*continued*. Selections from Reports of the Trigonometrical, Topographical and Revenue Surveys for 1867–68. [*Records of the Govt. of India (Home Dep.)* No. 74.]

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— Tables of Heights in Sind, the Punjab, North-West Provinces and Central India determined by the Great Trigonometrical Survey of India trigonometrically and by spirit levelling operations, to May, 1862. *Calcutta*, 1863. 8vo.

— Tables of Heights in the Punjab, North West Provinces, and Oudh, determined by the spirit-levelling operations of the Great Trigonometrical Survey of India, in 1866–70.

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— Tables of Heights in the North West Provinces and Bengal, determined by the spirit-levelling operations of the Great Trigonometrical Survey of India, in 1870–72.

Dehra Dun, 1872–73. 8vo.

— [*Tea*.] Copy of Papers . . . relating to the measures adopted for introducing the Cultivation of the Tea Plant within the British possessions in India. [*Lond.*] 1839. folio.

— [*Telegraphs*.] Administration Report of the Indo-European Telegraph Department, 1887–88 (1888–89, *etc.*).

Calcutta, 1889, *etc.* folio.

— Administration Report of the Telegraph Department, 1879–80, (1880–81, *etc.*) *Calcutta*, 1881, *etc.* folio.

— [A collection of Official Papers relating to Electric Telegraphs in India.] *Lond.* 1855–70. folio.

— Construction Code. *Calcutta*, 1885. 8vo.

— Diagrams of Construction Stores. *Calcutta*, 1885. 8vo.

— Copies of reports from India respecting Telegraphs.

Lond. 1855. folio.

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— Distribution Return of Lines and Offices compiled to 31st March, 1886, (1887, *etc.*) *Calcutta*, 1886, *etc.* folio.

— First Report on the operations of the Electric Telegraph Department in India, 1855–56. *Calcutta*, 1856. 4to.

— [*Trade*.] Annual statement of the Trade and Navigation of British India with Foreign Countries, and of the coasting trade of the several Presidencies and Provinces.

Calcutta, 1878, *etc.* folio.

— Review of the Trade of India, 1887–88, (1888–89, *etc.*)

Simla, 1888, *etc.* folio.

- INDIA.—[*Trade*].—*continued*. Nine reports on the State of Trade, revenues, and government. *East Indies*, 1772–73. folio.
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- Papers relating to Water-Supply Schemes in India. 3 parts. [*Selections from the Govt. of India (P.W.D.)* Serials Nos. 18, 19, 20.] *Calcutta*, 1889. folio.
- [*Weights and Measures*.] An Act to regulate the Weights and Measures of Capacity in India (No. 31 of 1871). *Lond.* 1872. folio.
- Memorandum on the Verification of Standard Weights for use in India, *etc.* *Lond.* 1893. folio.
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- Wreck Chart for India for 1864–65. [*Public Works Dept. Proceedings*, December, 1866.] [*Calcutta*, 1866.] folio.
- AGRA. Papers regarding the Irrigation of the Agra District from the Ootunghun River. *Roorkee*, 1853. folio.
- AGRA CANAL. Agra Canal Atlas [of] Plans. *Roorkee*, 1884. 4to.
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- INDIA—*continued*. BAHAWALPUR. Canal Irrigation Report, 1875-76, by J. W. Barns. *Tract. folio. vol. 26.*
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[Calcutta?] 1868-69. fo
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- BENGAL. Copies of, or Extracts from Correspondence, relating the case of three Assistant Surgeons dismissed from the Bengal Establishment. Lond. 1890. fo
- A new and improved Map of Bengal, Behar, and Benares, J. B. Tassin. Calcutta, 1841. 4
- [Administration.] Report on the Administration of Bengal 1871-72. Calcutta, 1872. 8
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- Revenue Report of Irrigation Works in Bengal, 1883- (1884-5, etc.). Calcutta, 1884, etc. fol
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- Report of Works carried out from the Amalgamated District Roads Fund in 1860–61 (1861–62). *Calcutta*, 1861–62. folio.
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- BOMBAY. Annual Report of the Commissioner of the Municipality of Bombay, 1867–68. 2 vols. *Bombay*, 1868–69. folio.
- The Bombay Quarterly Civil List, corrected to the 1st January, 1889. *Bombay*, 1889. 8vo.
- Gazetteer of the Bombay Presidency. Vols. 17–20. 4 vols. in 6. *Bombay*, 1884. 8vo.
- [*Cotton.*] Cotton: an account of its culture in the Bombay Presidency. . . . Prepared from Government Records by W. R. Cassels. *Bombay*, 1862. 8vo.
- [*Drainage.*] Correspondence on the subject of the Drainage of Bombay. *Bombay*, 1863. 8vo.
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- Papers relating to the Prince's Dock Extension, Bombay. [*Selections from Records of the Govt. of India (P.W.D.)* Serial No. 14.] *Calcutta*, 1888. folio.
- Papers relating to Prince's Dock. [*Calcutta?*] 1871–74. folio.

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- Irrigation projects for the Bombay Presidency. Land in the Pahiya and Godavery Valleys near Newassa.—The Lakh Project. (Case of plans.) [*Selections from Records of the Bombay Govt.* No. 3, Irrigation Series.] Bombay, 1866. 8vo.
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- Papers relating to a direct Water Communication between the Ganges and Calcutta. [*Records of the Bengal Govt.* No. 19.] Calcutta, 1854. 8vo.
- Statement of Proceedings relative to the Calcutta and Saugur Railway and Harbour. *Tract.* 8vo. vol. 382. Lond. 1838. 8vo.
- [*Docks.*] Kidderpore Docks. [Three plans referring to the proposed Wet Docks at Calcutta. Compiled by P. Souttar.] Calcutta, 1883. folio.
- Reports connected with the project for the Construction of Docks at Calcutta. 2 parts. [*Selections from Records of the Govt. of India (P.W.D.)* Serials Nos. 4 and 9.] Calcutta, 1885, 87. folio.
- [*Drainage.*] First (second) report of the Municipal Commissioners on the arrangements made for carrying out a new system of Drainage and Sewerage of the town. *Tract.* 8vo. vol. 244. Calcutta, 1858, 61. 8vo.
- Letter from the Municipal Commissioners to the Government of Bengal, forwarding a Report on the Drainage of Calcutta, by W. Clark. *Tract.* 8vo. vol. 244. Calcutta, 1855. 8vo.
- Report by the Messrs. Rendel on the Drainage of Calcutta. *Tract.* 8vo. vol. 244. Calcutta, 1858. 8vo.
- Report of the Committee on the Drainage of Calcutta. *Tract.* 8vo. vol. 244. Calcutta, 1857. 8vo.
- See also *infra* :—[*Water Supply.*]
- [*Exhibition, 1883–84.*] Official Report . . . Compiled under the orders of the Executive Committee. 2 vols. Calcutta, 1885. 8vo.

- INDIA.—CALCUTTA—*continued*. [*Improvements*.] Administration Report of the Commissioners for making improvements in the Port of Calcutta, for 1874–75. *Calcutta*, 1875. folio.
- [*Library*.] Catalogue of the Public Library of Calcutta. *Tract*. 8vo. vol. 386. *Calcutta*, 1846. 8vo.
- Report . . . for 1847 and 1848. *Tract*. 8vo. vol. 85. *Calcutta*, 1848. 8vo.
- [*Mint*.] See *supra* :—INDIA.—[*Public Service Commission*.] Proceedings of Sub-Committee. Vol. 2. 1887.
- [*University*.] Calendar for 1872–73, (1887, *etc.*) *Calcutta*, 1872, 86, *etc.* 8vo.
- [*Water Supply*.] [A Collection of official Papers relating to the Water Supply and Drainage of Calcutta.] *Calcutta*, 1863–68. folio.
- CENTRAL PROVINCES. Progress Report of Forest Administration . . . 1862–63, by G. F. Pearson, *etc.* [*Records of the Govt. of India (P.W.D.)* No. 47.] *Calcutta*, 1864. 8vo.
- Topographical Report on the Political Districts of Raigurh, Sarungurh, Sonapore, and Sumbulpore. [*Records of the Bengal Govt.* No. 23.] *Calcutta*, 1855. 8vo.
- CEYLON.—[*Coinage*.] Report by G. L. Molesworth on Decimal Coinage. *Tract*. folio. vol. 16. *Colombo*, 1869. folio.
- [*Floods*.] Report of the Flood Commission. *Colombo*, 1873. folio.
- Decimal sub-division of the Rupee. *Tract*. folio. vol. 9. *Colombo*, 1869. folio.
- [*Irrigation*.] Report on the proposed Deduru-oya project : by H. Parker. *Colombo*, 1889. folio.
- Reports of the Central and Provincial Irrigation Boards, 1887, *etc.* *Colombo*, 1888, *etc.* folio.
- Despatch relating to the Report of the Central Irrigation Board, for 1888. *Colombo*, 1890. folio.
- [A volume of miscellaneous Papers relating to Irrigation in Ceylon, 1867–82.] *Colombo*, 1867–82. folio.
- [*Lighthouses*.] Return . . . for “Copy of Correspondence respecting the proposed Lights on the South East Coast of Ceylon . . . and Estimates of Expenses regarding the same,” *etc.* *Lond.* 1863. folio.
- [*Meteorology*.] The Meteorology of Ceylon in 1881. *Colombo*, 1884. folio.
- Results of Meteorological Observations in Ceylon, 1880, and returns of Rainfall during 1880 and 1881 and means during different periods. *Colombo*, 1880–82. folio.

- INDIA.—CEYLON—*continued*. [*Public Works*.] Administration Reports, 1870, (1871, *etc.*) *Colombo*, 1870, *etc.* folio.
- Minutes of Sir H. G. Ward. *Ceylon*, 1855–60. folio.
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- [*Railways*.] Administration Reports of Government Railways, 1868–78. [*Colombo*, 1869–79?] folio.
- Ceylon Government Railways: Haputale Extension. Specifications, lists of drawings . . . and particulars of work, and schedule of prices [by F. J. Waring]. 2 vols. *Lond.* 1888. folio.
- Ceylon Government Railways: Nawalapitiya to Nanu Oya extension. Contract, with specifications and quantities. (Drawings, cross sections, longit. sections, *etc.*) 3 vols. *Lond.* 1879. folio.
- Correspondence relating to Railway Extension. *Tract.* folio. vol. 9. *Colombo*, 1870. folio.
- Estimated Receipts and Profit on the Railway from Pérádeniya to Náwalapitiya. *Tract.* folio. vol. 9. *Colombo*, 1870. folio.
- Extension Reports of Government Railways, 1875–79. [*Colombo*, 1876–80?] folio.
- Guide to Ceylon Government Railways. With a notice of Nuwara Eliya, the Sanatorium of Ceylon; and of Kakgala Gardens. *Tract.* 8vo. vol. 412. *Colombo*, 1886. 8vo.
- Interim (and 2nd) Report of the Commissioners . . . on the means of improving Railway Communication with the northern parts of the Island, *etc.* *Colombo*, 1890–91. folio.
- Jaffna Railway Survey. Report upon the Visit of Inspection to the country between Kurunégala and Jaffna, by F. J. Waring. *Colombo*, 1892. folio.
- Papers relating to the affairs of the Ceylon Railway. *Lond.* 1871. folio.
- Railway Extension to Bandarawela. Report and Estimates by F. J. Waring. *Colombo*, 1892. folio.
- Proposed Railway to Chilaw. Reports and Estimates by the Chief Resident Engineer, *etc.* *Colombo*, 1887. folio.
- Railway Extension to Galle. Report and Estimate by F. J. Waring. *Colombo*, 1892. folio.
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- Railway Extension to Mátara. Reports and Estimates by F. J. Waring. *Colombo*, 1891. folio.

- INDIA.—CEYLON.—[*Railways*].—*continued*. Railway Extension to Nawalapitiya. Report, etc. *Tract. folio. vol. 9.*
Colombo, 1870. folio.
- Railway Extension to Uva. Despatches relating to the Haputale-Nanu-Oya Section. *Colombo, 1885. folio.*
- Report of a Select Committee of the Legislative Council, to report upon the subject of the Railway Question. *Tract. 8vo. vol. 123.*
Colombo, 1859. 8vo.
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[1880.] folio.
- Reports of the General Manager of Railways, 1885 (1886, etc.).
Colombo, 1886, etc. folio.
- Reports on Light Railways: by G. L. Molesworth. *Tract. folio. vol. 9.*
Colombo, 1870. folio.
- [*Ropeways*.] Report on Wire Tramways: by G. L. Molesworth. *Tract. folio. vol. 9.*
Colombo, 1870. folio.
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[Colombo, 1892.] folio.
- [*Colombo*.] Correspondence relating to the Harbour Works and Breakwater of Colombo for 1872–1881. *Colombo, 1872–81. folio.*
- Correspondence relating to Colombo Waterworks for 1877, 79, 81.
Colombo, 1877–81. folio.
- Papers relating to Flood outlets for Colombo. 1877–78–80.
Colombo, 1877–78–80. folio.
- Report upon the . . . failure of the Maligakanda Reservoir, Colombo Waterworks. *Colombo, 1887. folio.*
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- COOCH BEHAR. [Detailed Drawings of Cooch Behar Palace.]
Calcutta, 1882. folio.
- CUTTACK. Papers on the subject of the Cuttack Rivers, containing Capt. Harris's 2nd report. *Calcutta, 1858. folio.*
- Papers relative to the Cattock Rivers. 2 parts. (Atlas of plates.) [*Records of the Bengal Govt. No. 35.*]
Calcutta, 1860. 8vo. and folio.
- See also *infra*:—MIDNAPORE.
- DAMOODAH, River. Embankments of the Damoodah. [*Records of the Bengal Govt. No. 12.*]
Calcutta, 1853. 8vo.
- Papers of 1853 and 1854, (1859 to 1863) on the Damoodah Embankments. [*Records of the Bengal Govt. Nos. 15 and 40.*]
Calcutta, 1854, 63. 8vo.
- See also *supra*:—BENGAL.—[*Rivers*.]
- DECCAN. A paper on Irrigation in the Deccan and Southern Maratha Country: by Col. Playfair. [*Selections from Records of the Bombay Govt. No. 5.*]
Bombay, 1866. 8vo.

INDIA—*continued.* DELHI. Report on the Drainage of Delhi.

Agra, 1852. folio.

— [Water Supply.] See *supra* :—BENGAL.—[Water Supply.] Reports on the Water Analysis in Bengal, *etc.* 1867.

— DELHI RAILWAY. Opening of the Meerut and Umballa section of the Delhi Railway, on the 14th of November, 1868. *Tract.* 8vo. vol. 166. *Lond.* 1869. 8vo.

(Compiled from the Indian newspapers.)

— DIAMOND HARBOUR. Report of the Committee appointed to consider the question of constructing Wet Docks at Diamond Harbour, *etc.* *Calcutta*, 1882. folio.

— GANGES CANAL. [Album of photographic views on the Ganges Canal.] 1885. folio.

— Collection of the Proceedings of the Govt., N.W.P., relating to the project of the Lower Ganges Canal. *Calcutta*, 1874. folio.

— Estimate of probable expense to be incurred in constructing the Ganges Canal Works. *Umballa*, 1850. folio.

— Estimates for the Lower Ganges Canal. 3 vols. in 1. *Calcutta*, 1871-77. folio.

— General Instructions for the Executive Officers of the Canal Works. [Roorkee, 1847.] folio.

— No. 1 Project. Estimate of the probable expense of the Khadir Works on the Canal, passing the Solani River by aqueduct. *Calcutta*, [1845?] folio.

— Report of the Ganges Canal Committee. *Roorkee*, 1866. folio.

— Resolution by the Lieut. Gov. of the N.W. Provinces . . . on the Report of the Ganges Canal Committee, *etc.* *Roorkee*, 1867. folio.

— Report on the Ganges Canal from Hurdwar to Cawnpore and Allahabad. Appendices. *Calcutta*, 1845. folio.

— Report on measures for remodelling the Ganges Canal: drawn out by Capt. Crofton. *Calcutta*, 1865. folio.

— Report on the Ganges Canal, with estimates and plans. By Capt. J. Crofton. Vols. 1 and 2. *Calcutta*, 1865. folio.

— Reports on the remodelling of the Canal: by Captain Crofton. *Calcutta*, 1864-67. folio.

— Revenue Reports of the Ganges Canal, for 1855-56. By R. Baird Smith, *etc.* [Records of the Govt. of India (P.W.D.) No. 21.] *Calcutta*, 1856. 8vo.

— Short Account of the Ganges Canal. [1853?] folio.

— GODAVARI, *River*. [Account of an Official Tour of the Godavari and Kishna Deltas.] *Madras*, 1859. folio.

— Minute by Sir H. M. Durand on the Godavery Navigation Project. *Calcutta*, 1867. folio.

- INDIA.—GODAVARI, *River*—*continued*. Minutes and correspondence . . . relating to the opening up of the River Godavery, *etc.*
Lond. 1868. folio.
- Navigation of the Godavery. [*Records of the Madras Govt.* No. 1 of 1854.] *Madras*, 1856. 8vo.
- Navigation of the Godavery: report by Lieut. Haig, *etc.* [*Records of the Madras Govt.* No. 3 of 1855.] *Madras*, 1857. 8vo.
- Papers . . . relating to the Godavery. *Lond.* 1862. folio.
- [Further papers on the Godavery River.] *Calcutta*, 1867. folio.
- Project for the Navigation of the River Godavery. *Calcutta*, 1867. folio.
- Report on the Navigability of the River Godavery and some of its affluents: by Lieut. T. F. Haig, *etc.* *Madras*, 1856. folio.
- Report on the Upper Godavery Works: by Lieut. Col. J. C. Anderson and Lieut. Col. J. G. Fife. *Nagpore*, 1866. 8vo.
- *See also*:—MADRAS.—[*Irrigation*.]
- GOGRA, *River*. Survey of the River Gogra. [*Records of the Govt. of India (Foreign Dept.)* No. 4.] *Calcutta*, 1854. 8vo.
- GURHWAL. Report on Metalliferous Deposits, *etc.* *See infra*:—KUMAON.
- HIDGELLÉE. Report on the Hidgelee Province Embankments. 1861. By W. D. Short. [*Records of the Govt. of India (P.W.D.)* No. 36.] *Calcutta*, 1862. 8vo.
- — *See also infra*:—MIDNAPORE.
- HIMALAYA MOUNTAINS. Papers relative to the Colonization, Commerce, Physical Geography, *etc.*, of the Himalaya Mountains and Nepal: by B. H. Hodgson. [*Records of the Bengal Govt.* No. 27.] *Calcutta*, 1857. 8vo.
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- Memorandum on the River Hooghly: together with a report on operations for its improvement carried on during 1862–63. By H. Leonard. [*Records of the Government of India (P.W.D.)* No. 45.] *Calcutta*, 1864. 8vo.
- Report on the River Hooghly: by H. Leonard. *Tract.* folio. vol. 10. *Lond.* 1865. folio.
- Reports connected with the Improvement of the River Hooghly. [*Selections from Records of the Govt. of India (P.W.D.)* Serial No. 1.] *Calcutta*, 1886. folio.
- Reports . . . of the Committee appointed . . . to enquire into the State of the River Hooghly. *Calcutta*, 1854. folio.
- Silting of the River Hooghly: by G. Robertson. [Letter to the Under-Secretary of State for India.] *Edinburgh*, 1875. folio.
- HOSHIARPUR. Memorandum of the first eight years of British Rule in the district of Hoosheepore, Punjab: by S. A. Abbott. *Lahore*, 1857. 8vo.

- INDIA—*continued*. HYDERABAD. Preliminary Report on the Hyderabad Water Supply Project: by G. Palmer. *Hyderabad*, 1885. folio.
- Report on Famine Relief Works in H.H. Nizam's Dominions, 1876-77: by G. Palmer. *Bombay*, 1879. folio.
- Catalogue of the Hyderabad Exhibition. *Tract*. 8vo. vol. 121. *Secunderabad*, 1856. 8vo.
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- INDORE. Report on the proposed line of Railway to connect Indore and Southern Malwa with the G.I.P. Railway in Nimar: by C. Campbell. *Calcutta*, 1871. folio.
- INDUS, *River*. Note on the several Floods which have occurred in the River Indus. *Tract*. folio. vol. 26. [*Calcutta*,] 1875. folio.
- The Route of the Indus, and the Advance of Russia towards India: a letter on the importance and necessity of placing Delhi and Lahore in railway communication with Kurrachee on the Arabian sea. By an Officer. *Tract*. 8vo. vol. 144. *Lond.* 1865. 8vo.
- The Navigation of the Indus, and Railways in Scinde and the Punjaub. A letter to the Court of Directors of the Honourable East India Company, *etc.* By an Indian Officer. *Tract*. 8vo. vol. 112. *Lond.* 1858. 8vo.
- *See also infra*:—SIND. Memoirs on the Province of Sind, *etc.* 1855.
- IRAWADI, *River*. Memorandum on the Irawadi River. *Calcutta*, 1858. folio.
- Notes on subjects connected with works in the Irrawaddy Circle . . . with records of Experiments on the Double Float and Woltmann Meter current measurements. *Rangoon*, 1883. folio.
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- KARÁCHI. Karáchi Harbour (Kurrachee) . . . Geographical position . . . tides, depths of water, port dues, and pilotage fees . . . [With a] Chart of the Harbour, *etc.* *Karáchi*, 1892. 8vo.

- INDIA.—KARÁCHI—*continued*. Kurrachee Harbour: Memoir by W. Parkes. [Lond. 1869.] 4to.
- Kurrachee Harbour Works. Correspondence from 1856 to 1866–67. 2 vols. Bombay, 1866–67. folio.
- Kurrachee Harbour Works. Memoir drawn up by W. H. Price. [Kurrachee, 1873.] folio.
- Report of W. Parkes on the present state of the Harbour. Bombay, 1868. folio.
- Report on the state of the Harbour and Improvement Works, as shown by the Survey of Oct. 1871: by W. Parkes. Lond. 1872. folio.
- Report on . . . Kurrachee Harbour Works: by Col. H. St. C. Wilkins, *etc*. [Kurrachee, 1879.] folio.
- Report on the Survey of Karáchi Harbour, January, 1891. Karachi, 1891. folio.
- *See infra* :—SIND. Memoirs on the Province of Sind, *etc*. 1855.
- KATTYWAR. Historical, Geographical and Statistical Memoirs on the Province of Kattywar, *etc*. (Map of the Province.) [Selections from Records of the Bombay Govt. No. 37, n.s.] Bombay, 1856. 8vo.
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- KIRKEE. *See below* :—POONA. Water Supply Project: by Lieut. Col. Fife. 1866.
- KRISHNA, River. Album of photographs illustrating the Works in connection with the Bridge over the Kistna [Krishna] River at Bezwada on the East Coast Railway. [Madras? 1893.] obl. 4to.
- — *See also* :—GODAVARI, River, and MADRAS.—[Irrigation.]
- KUMAON. Report on the Government Iron Works at Kumaon . . . with remarks on the Iron deposits of the Himalayas: by W. Sowerby. [Records of the Govt. of India (P.W.D.) No. 26.] Calcutta, 1859. 8vo.
- Reports on the Survey of the Mineral Deposits in Kumaon and on the Iron Smelting operations . . . at Dechouree: by W. Sowerby. [Records of the Govt. of India (Home Dep.) No. 17.] Calcutta, 1856. 8vo.

- INDIA.—KUMAON—*continued*. Report on the Metalliferous Deposits of Kumaon and Gurhwal . . . by W. J. Henwood. [*Records of the Govt. of India (HomeDep.)* No. 8.] Calcutta, 1855. 8vo.
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- Papers relating to Madras Harbours. [*Selections from Records of the Govt. of India (P.W.D.)* Serial No. 5.] *Calcutta*, 1885. folio.
- Report on the formation of a Harbour at Madras: by W. Parkes. *Madras*, 1873. folio.
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- Correspondence . . . between the Secretary of State for India . . . and the Directors of the Madras Irrigation Company, relative to its present condition and future prospects. *London*, 1872. folio.
- Improvements of Irrigation Works. [*Records of Madras Govt.* No. 2.] *Nellore*, 1867. folio.
- Reports on Irrigation, 1866–69. [*Proceedings of the Madras Government, Pub. Works Dep.*] *Madras*, 1866–69. folio.
- Selections from the Proceedings of the Madras Government in the Public Works Department. The Godavari, Kistna, and Cauvery Delta and the Penner Anicut Systems. *Madras*, 1883. folio.
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- INDIA.—MADRAS.—[*Museums*].—*continued*.—Report on the Government Central Museum and the local Museums in the provinces, for 1855–56, etc. [*Records of the Madras Govt.* No. 39.]
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Madras, 1860. folio.
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Lond. 1853. folio.
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 (Vol. 1, pt. 1 wanting.)
- Report of the Proceedings of the Railway Department during the year ending 30th April, 1860. *Madras*, 1860. folio.

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- [*Revenue*.] Papers relating to the Commutation Rates of the Madras Presidency. [*Records of the Madras Govt.* No. 31.] *Madras*, 1856. 8vo.
- Papers relating to the general Revenue Survey of the Madras Presidency. [*Records of the Madras Govt.* Nos. 53 and 74.] *Madras*, 1858, 63. 8vo.
- Revenue Administration Report, 1859–60. [*Madras*, 1860.] folio.
- Brief Report on the Revenue Survey and Settlement Operations for 1859–60. *Madras*, 1860. folio.
- [*Roads*.] General Report of the Road Department, for 1854–55. [*Records of the Madras Govt.* No. 13.] *Madras*, 1855. 8vo.
- Reports on District Roads, for 1853, (1854, 1855–56.) [*Records of the Madras Govt.* Nos. 8, 30, 47.] 3 vols. *Madras*, 1855–57. 8vo.
- [*Sanitary Commission*.] Second Annual Administration Report, May–Dec. 1865. *Madras*, [1866.] folio.
- Report of the Sanitary Commissioner, 1866–68. 3 vols. *Madras*, 1867–69. 4to.
- [*Sewage*.] Reports and orders . . . regarding the adoption of the Dry Earth System of Conservancy in Barracks, Hospital Prisons, etc. *Madras*, 1865. 8vo.
- Further Report . . . upon the Dry Earth System of Sewage in the Madras Presidency. *Madras*, 1868. folio.
- [*Telegraphs*.] Annual Administration Report of the Telegraph Department, 1859–60. *Madras*, 1860. folio.
- [*University*.] Calendar. 1886–87, etc. *Madras*, 1886, etc. 8vo.
- [*Vaccination*.] Report on Vaccination, for 1855. [*Records of the Madras Govt.* No. 33.] *Madras*, 1856. 8vo.
- [*Waterworks*.] Report on Madras Waterworks: by W. Fraser. [*Records of Madras Govt.* No. 1.] *Mount Road*, 1866. folio.
- [*Weights and Measures*.] Memorandums on Land Measures and Weights and Measures of the Madras Presidency. *Calcutta*, 1833. 8vo.
- MAGHASSANI HILLS. *See supra*:—BENGAL.—[*Irrigation*.] Papers relating to Irrigation, etc. 1861.
- MAHANUDDY, River. Report on the Mahanuddy and its tributaries, the resources and trade of the adjacent countries, and the proposed works for the improvement of navigation and irrigation. By [Sir] R. Temple. [*Records of the Govt. of India (P.W.D.)* No. 43.] *Calcutta*, 1864. 8vo.
- [Report on the Mahanuddy River, treating chiefly of the means of disposing of the excessive flood waters.] *Calcutta*, 1860. folio.

- INDIA—*continued*. MAHRATTA COUNTRY. Memorandum on the proposed Railway in the Southern Mahratta Country [Hyderabad and Sedshegur Railway]. [Madras,] 1858. folio.
- A paper on Irrigation in the Southern Maratha Country. [Selections from Records of the Bombay Govt. No. 4, Irrigation Series.] Bombay, 1866. 8vo.
- See also *supra* :—DECCAN.
- MARTABAN. See *infra* :—TENASSERIM. Progress Report of Forests, etc., 1861.
- MAYNEE. Papers relating to the Maynee [Irrigation] Project in the Khuttaw Talooka. (Case of Plans.) [Selections from Records of the Bombay Govt. No. 8, Irrigation Series.] Bombay, 1867. 8vo.
- MIDNAPORE. Report on the Districts of Midnapore (including Hijelee), and Cuttack : by H. Ricketts. Calcutta, 1858. 8vo.
- MITROW CANAL. Papers relating to the Mitrow Canal in the Eastern Narra Districts, Sind ; with plans and estimates of Roads, Bridges, etc. (Case of Plans.) [Selections from Records of the Bombay Govt. No. 7, Irrigation Series.] Bombay, 1867. 8vo.
- MOORSHEDEBAD. Extracts from the official records, with descriptive details regarding the new Nizamut Palace of Moorshebad. Tract. 8vo. vol. 59. Calcutta, 1839. 8vo.
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- NAGPUR. Annual Progress Report, Nagpur Water Works, 1871, (1872, 73.) Nagpur, 1851-73. folio.
- Completion Report of the Nagpur Water Works High Level Extension, 1890. [Selections from Records of the Govt. of India (P.W.D.) Serial No. 29.] Calcutta, 1893. folio.
- Memoranda on the Ambajerry Water Supply Projects. [Nagpur,] 1870. folio.
- Report on the Nagpore Exhibition. Nagpore, 1865. 8vo.
- Note on the Nagpur and Chhattisgarh State Railway. Bombay, 1882. 4to.
- Photographic Views of the Nagpur and Chhattisgarh Railway. 2 vols. Bombay, 1882. folio.
- Report on the projected Tramways for Nagpore and the Eastern districts of the Central Provinces : by [Sir] R. Temple. [Records of the Govt. of India (P.W.D.) No. 41.] Calcutta, 1864. 8vo.
- NAJAFGARH JHIL. Correspondence regarding the Drainage of the Nujjufgurh Jheel. Agra, 1855. 8vo.
- Reports and Surveys regarding the Nujjufgurh Jheel. [Calcutta,] 1838. folio.

- INDIA—*continued*. NARRA, *River*. Report on the upper portion of the Eastern Narra: its sources of supply, and the feasibility of restoring it as a permanent stream. [*Selections from Records of the Bombay Govt.* No. 45, n.s.] Bombay, 1857. 8vo.
- Captain Fife's Report on the Eastern Narra, etc. [*Selections from Records of the Bombay Govt.* No. 60, n.s.] Bombay, 1861. 8vo.
- NEPAL. *See supra*:—HIMALAYA MOUNTAINS. Papers relating to the Himalaya Mountains and Nepal. 1857.
- NERBUDDA, *River*. Memoir on the physical character of the Nerbudda River and Valley; with . . . an analysis of the . . . correspondence of Government on the subject of the Coal Beds in its vicinity: by Surgeon E. Impey, etc. [*Selections from Records of the Bombay Govt.* No. 14.] Bombay, 1855. 8vo.
- Papers on the Coal of the Nerbudda Valley, Tenasserim Provinces and Thayet-Myo. [*Records of the Govt. of India (Home Dep.)* No. 10.] Calcutta, 1856. 8vo.
- Report of Examination of the Mineral Districts of the Nerbudda Valley, by J. H. Blackwell. [*Selections from Records of the Bombay Govt.* No. 44, n.s.] Bombay, 1857. 8vo.
- NIRA CANAL. Report on the Nira Canal project, Poona District. Bombay, 1892. folio.
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- NORTH WESTERN PROVINCES. First annual Report of the Sanitary Commissioner; 1868. Allahabad, 1869. folio.
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- Memorandum on Irrigation Expenses. 1856. folio.
- Map showing Canals completed, in progress, and proposed, N.W.P. and Oudh. *Tract. folio. vol. 36.* Roorkee, [] folio.
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- Report on the Revenue Returns of the Canals . . . in the N.W. Provinces, for 1859-60, (1860-61.) [*Records of the Govt. of India (P.W.D.)* No. 33, 38.] Calcutta, 1861-63. 8vo.
- Resolution by the Government of India . . . relative to the Canals of the North Western Provinces. Lond. 1865. folio.
- Selections from the Records of the Government. 2 vols. Calcutta, Allahabad, 1856-1866. 8vo.
- NORTH WEST PROVINCES AND OUDH MUSEUM. *See supra*:—LUCKNOW.
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- NUJJUGURH JHEEL. *See NAJAFGARH JHIL.*

- INDIA—*continued*. ORISSA. Papers relating to the Orissa Canals, 1869 to 1877 and 1881 to 1883. [*Records of the Govt. of Bengal.*] Calcutta, 1884. folio.
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- — 2nd Series. [*P.W.D. Serial No. 23.*] Calcutta, 1889. folio.
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- Progress Report of the Punjab Northern Railway. Tract. folio. vol. 23. Rawalpindi, 1877. folio.
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- *See also supra* :—PUNJAB.
- ROHILKUND. Report on the Canal Irrigation of Rohilkund . . . By Capt. W. Jones. Roorkie, 1855. 4to.
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- [Irrigation.] Annual Irrigation Revenue Report, Sind, 1892-93. [*Bombay,*] 1894. folio.
- Papers relating to Canal Irrigation in Sind : with suggestions for its improvement. [*Selections from Records of the Bombay Govt. No. 69, n.s.*] Bombay, 1863. 8vo.
- A sketch of Irrigation in Sind, with proposal for its improvements : by J. G. Fife. Hyderabad, 1855. folio.
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[Formerly (1872-80) the SOCIETY OF TELEGRAPH ENGINEERS and (1881-88) THE SOCIETY OF TELEGRAPH ENGINEERS AND ELECTRICIANS.]

- Journal . . . Including original communications on Telegraphy and Electrical Science. Vol. 1, (2, etc.) *Lond.* 1872, etc. 8vo.
- Rules and regulations for the prevention of Fire risks arising from Electric Lighting. *Tract.* 8vo. vol. 400. *Lond.* 1883. 8vo.

INSTITUTION OF ENGINEERS AND SHIPBUILDERS IN SCOTLAND. Papers and Tests contributed to the Institution in an inquiry into the strength of Copper Steam Pipes, with discussion, 1887-88. *Tract.* 8vo. vol. 457. *Glasgow,* 1888. 8vo.

- Transactions. Vols. 1-34. *Glasgow,* 1858-91.
- President's Address. *Glasgow,* 1877. 8vo.

INSTITUTION OF LOCOMOTION FOR STEAM TRANSPORT AND AGRICULTURE. Prospectus, etc. *Tract.* 8vo. vol. 98. *Lond.* 1833. 8vo.

INSTITUTION OF MECHANICAL ENGINEERS.

- Proceedings, 1847, etc. *Birmingham, Lond.* 1849, etc. 8vo.
- General Index to Proceedings. 1847-84. 2 vols. *Birmingham, Lond.* [1877, 85.] 8vo.
- Library Catalogue, [and] Subject Index of Papers in the Proceedings, 1847-1880. *Lond.* 1881. 8vo.

INSTITUTION OF MECHANICAL ENGINEERS—*continued.*

- Library Catalogues. [Another edition, with] Subject Index of Papers, 1847–1887. *Lond.* 1887. 8vo.
- Visit of members of the Institution of Mechanical Engineers to Bessbrook and the Bessbrook and Newry Electrical Railway, 2nd August, 1888. *Tract.* 8vo. vol. 473. [*Newry,*] 1888. 8vo.
- The Institution of Mechanical Engineers: a reprint of articles and correspondence from “Engineering.” *Tract.* 8vo. vol. 363. *Lond.* 1884. 8vo.
- Liverpool Meeting, 1891. Detailed Programme. *Tract.* 8vo. vol. 508. [*Lond.* 1891.] 8vo.
- Paris Meeting, 1889. Detailed Programme. Notices of works open to the visit of the Members. *Tract.* 8vo. vol. 484. 1889. 8vo.
- Report of the Proceedings at the General Meeting, held in Birmingham on 23rd October, 1850. *Tract.* 8vo. vol. 89. *Birmingham,* 1850. 8vo.

INSTITUTION OF NAVAL ARCHITECTS. Transactions. Vols. 1–33. *Lond.* 1860, *etc.*

- INSTITUTION OF PERMANENT-WAY INSPECTORS. Report of Proceedings. *Gloucester,* 1886, 88, 91, 92. 8vo.
- Rules. *Gloucester,* 1884. 8vo.

INSTITUTION OF SURVEYORS. *See* SURVEYORS’ INSTITUTION.INSTITUTO POLYTECHNICO BRAZILEIRO. Revista. Vol. 1, (2, *etc.*) *Rio de Janeiro,* 1868, *etc.* 8vo.INTERCOLONIAL CONFERENCE OF SURVEYORS, *Melbourne.* Report and Proceedings [of the] Intercolonial Conference of Surveyors held at Melbourne, 1892. *Tract.* folio. vol. *Melbourne,* 1892. folio.INTERCOLONIAL RAILWAY, *Canada.* Annual Report of the Commissioners, with a return of the cost of Survey. *Tract.* 8vo. vol. 402. *Ottawa,* 1872. 8vo.INTERNATIONAL ASSOCIATION FOR OBTAINING A UNIFORM DECIMAL SYSTEM OF MEASURES, WEIGHTS, AND COINS. I. Concise Narrative of its Origin and Progress. II. Adoption of the metric system. III. Measures and weights of the metric system. *Tract.* 8vo. vol. 202. *Lond.* 1867. 8vo.

- *British branch.* Fifth and ninth Reports. *Tract.* 8vo. vol. 202. *Lond.* 1861, 67. 8vo.

- Memorial on Decimal Weights. *Tract.* 8vo. vol. 202. *Lond.* 1859. 8vo.

- Observations on Mr. John Fernie’s Paper, “On the relative advantages of the inch and the mètre as the standard unit of decimal measure.” *Tract.* 8vo. vol. 172. *Lond.* 1865. 8vo.

INTERNATIONAL COAL AND RAILWAY COMPANY OF NOVA SCOTIA. Statement, *etc.* *Tract.* 8vo. vol. 208. *New York,* 1867. 8vo.

INTERNATIONAL CONGRESS OF ELECTRICIANS. Comptes-rendus des travaux [du Congrès tenu à Paris, 1881].

Paris, 1882. 8vo.

INTERNATIONAL CONGRESS OF ENGINEERS AND ARCHITECTS. VII^o nazionale e I^o internazionale congresso in Palermo. Programma. [Ital. and Fr.] *Tract. folio. vol.*

Palermo, 1889. folio.

INTERNATIONAL CONGRESS ON APPLIED MECHANICS. Comptes rendus des séances générales . . . du Congrès tenu à Paris, 1889. 4 vols. (Atlas of Plates.) Paris, 1889-90. 8vo. and 4to.

INTERNATIONAL CONGRESS ON ENGINEERING, Barcelona, 1888. Discursos, memorias, y disertaciones. Barcelona, 1890. 8vo.

INTERNATIONAL CONGRESS ON HYGIENE AND DEMOGRAPHY, Paris, 1878. Questions. Paris, 1878. 8vo.

1. Hygiène du nouveau-né.
2. De l'altération des cours d'eau. De leur corruption—1^o. Par les produits industriels : 2^o. Par les eaux d'égout.
3. Hygiène alimentaire.
4. Des logements des classes nécessiteuses.
5. Hygiène professionnelle.
6. Prophylaxie des maladies infectieuses et contagieuses.

— Vienna, 1887. Programme du 6^e Congrès, etc. *Tract. 8vo. vol. 438.*
Vienne, 1887. 8vo.

— London, 1891. Programme of the Seventh Congress, etc. *Tract. 8vo. vol. 508.*
Lond. 1891. 8vo.

— Rapport présenté par les Docteurs G. van O. de Meyer, W. P. Ruysch, et C. Stékoulis, (au 7^{me} congrès . . . tenu à Londres . . . 1891.) *Tract. 8vo. vol.* . . .
Bruges, 1892. 8vo.

— Transactions of the Seventh Congress, London, 1891. Edited by C. E. Shelley. 13 vols. Lond. 1892-93. 8vo.

Vol. 1. Preventive Medicine.

2. Bacteriology.
3. Relations of the diseases of animals to those of man.
4. Infancy, childhood, and school life.
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13. Miscellanea. [Including Lists of Officers, etc., and Indexes.]

INTERNATIONAL CONGRESS ON INLAND NAVIGATION.

—1st CONGRESS. Brussels, 1885. Examen des travaux de la Commission des canaux brabançons : par Jules De Blois.

Bruzelles, 1885. 8vo.

— Guide programme, etc. Bruzelles, 1885. 8vo.

— Mémoires . . . 1. Note de M. Cadart . . . sur l'accident survenu à l'ascenseur hydraulique d'Anderton, etc. 2. Note sur un pont mobile dit pont oscillant construit à l'Écluse des Dames (canal du Nivernais) : par M. B. de Mas. Bruzelles, 1885. 8vo.

INTERNATIONAL CONGRESS ON INLAND NAVIGATION.—

- 1ST CONGRESS—*continued*. Procès-verbaux des séances.
Bruzelles, 1885. 8vo.
- 2ND CONGRESS. *Vienna*, 1886. Rapports des délégués du Ministère des Travaux Publics de France sur les travaux du congrès. *Paris*, 1888. 8vo.
- Berathungen und Beschlüsse. *Wien*, 1887. 8vo.
- Catalog der während des Congresses veranstalteten Binnenschiffahrts-Ausstellung. *Wien*, 1886. 8vo.
- Verzeichniss der Theilnehmer. *Wien*, 1886. 8vo.
- 3RD CONGRESS. *Frankfort*, 1888. [A collection of Papers read at the Congress.] 2 vols. *Frankfurt a. M.*, 1889. 8vo.
- Besichtigung der Hafenanlagen von Mainz am 24 August, 1888. *Frankfurt am Main*, 1888. 8vo.
- Erläuterung zu den auf den Nord-Ostsee-Kanal bezüglichen beim . . . Congress . . . ausgestellten Zeichnungen und Schriftstücken. *Kiel*, [1888.] 8vo.
- Katalog für die während des Congresses stattfindende Ausstellung im Saalbau. *Frankfurt a. M.*, 1888. 8vo.
- Kurze Beschreibung des Projectes eines Oberrheinischen Schiffahrtskanals von Strassburg bis Speyer oder Ludwigshafen. *Strassburg*, 1888. 8vo.
- Rapport des délégués français sur les travaux du congrès. *Paris*, 1890. 8vo.
- Referate über die dem Congress zur Berathung gestellten Fragen. Herausgegeben von dem wissenschaftlichen und Redactions-Ausschuss. *Frankfurt a. M.*, 1888. 8vo.
- Regulirung der Isar in Niederbayern. 8vo.
- Relazione dei delegati del Ministero dei lavori pubblici d'Italia sui lavori del Congresso. *Roma*, 1889. 8vo.
- Sonder-Verzeichniss der seitens des Königlichen preussischen Ministeriums der öffentlichen Arbeiten ausgestellten Wandpläne, Druck- und Kartenwerke, Modelle u.s.w. *Berlin*, 1888. 8vo.
- Tagesbericht. 5 pts. *Frankfurt am Main*, 1888. 8vo.
- Uebersichts- Karte und Nivellement des Rheinstroms von Mainz bis Bingen. *Mainz*, 1888. 8vo.
- Verhandlungen der Allgemeinen und Abtheilungs-Sitzungen vom 20–23 August, 1888. Herausgegeben von dem wissenschaftlichen und Redactions-Ausschuss. *Frankfurt am Main*, 1889. 8vo.
- Verzeichniss der bis zum 1 August, 1888, angemeldeten Theilnehmer. 11^{te} ausgabe. *Frankfurt a. M.*, 1888. 8vo.
- 4TH CONGRESS. *Manchester*, 1890. Proceedings, etc. *Manchester*, 1890. folio.
- Relazione sui lavori del congresso, etc. 1891. See BOMPIANI, G., and LUIGGI, L.
- 5TH CONGRESS. *Paris*, 1892. [Minutes of Proceedings, Papers, Catalogue of Exhibits and Reports of the Congress.] 5 vols. *Paris*, 1892. 8vo.

INTERNATIONAL CONGRESS ON INLAND NAVIGATION.—
5TH CONGRESS—*continued*. Catalogue des publications parues sur
la navigation intérieure: rédigé et publié par le Comité de l'ex-
position, etc. Paris, 1892. 8vo.

— Rapport sur les travaux du Congrès. 1892. See COENE, J. DE.

INTERNATIONAL ENGINEERING CONGRESS, *Chicago*.
Papers read before Division A—Civil Engineering. 2 vols.
[*Transactions of the American Society of Civil Engineers*. Vols. 29
and 30.] New York, 1893. 8vo.

INTERNATIONAL GEOLOGICAL CONGRESS. Compte rendu
de la 4^e session, Londres, 1888. Londres, 1891. 8vo.

— [Details of arrangements respecting the London meeting of the
Congress, 1888.] *Tract*. 4to. vol. 108. Lond. 1888. 4to.

INTERNATIONAL HEALTH AND EDUCATION EXHIBITION.
1884. See LONDON.—[*Exhibitions*.]

INTERNATIONAL MARITIME CONGRESS.

Second meeting: held at the Institution of Civil Engineers.
London, 1893.

General Report, with List of Members. Lond. [1893.] 8vo.
Minutes of Proceedings. Lond. [1893.] 8vo.

Section 1. Harbours and Breakwaters.

„ 2. Docks.

„ 3. Shipbuilding and Marine Engineering.

„ 4. Lighthouses, Buoys, Fog-signals, etc.

INTERNATIONAL POLAR EXPEDITIONS, 1882–83. Observa-
tions. (Fort Rae.) Lond. 1886. 4to.

INTERNATIONAL RAILWAY CONGRESS. Bulletin de la
Commission internationale du Congrès des chemins de fer.
[Containing Papers read at the sessions of the Congress.] Vol. 1
(2, etc.). Bruxelles, 1887, etc. 4to.

Session 1. Brussels, 1885.

„ 2. Milan, 1887.

Session 3. Paris, 1889.

„ 4. St. Petersburg, 1892.

— Compte-rendu général. 8 vols. Bruxelles, 1886–90. 8vo.

INTERNATIONAL SANITARY CONFERENCE. Correspondence
respecting the International Sanitary Conference at Rome.

(Parliamentary Paper.)

Lond. 1885. folio.

INTERNATIONAL SCIENTIFIC COMMISSION. Isthmus of
Suez Ship Canal. Report and Plan: with Appendix containing
the latest official documents. (*Suez Canal Tracts*, Vol. 2.)

Lond. 1857. 8vo.

INTERNATIONAL TELEGRAPH CONVENTION. International
Telegraph Convention, with London Revision of Service Regula-
tions and tariffs, 1879. Translated by A. Brasher.

Lond. 1879. folio.

INTERNATIONALER VEREIN GEGEN VERUNREINIGUNG
DER FLÜSSE DES BODENS UND DER LUFT. Verhand-
lungen. Frankfurt a. M., 1878–81. 8vo.

INTEROCEANIC CANAL CONGRESS. *Compte rendu des séances du Congrès international d'études du canal interocéanique.*

Paris, 1879. 4to.

INTZE, O. Die bessere Ausnutzung der Gewässer und der Wasserkräfte auf Veranlassung des Vereins Deutscher Ingenieure im Jahre, 1888, in Aachen und Breslau gehaltene Vorträge. *Tract. 8vo. vol. 482.*

Berlin, 1889. 8vo.

INVERNESS. Report of the Surveying Officers, and minutes of evidence on the Inverness Gas and Water Bill.

Lond. 1847. folio.

— Report on the Water-Power in the neighbourhood [by F. Nell and J. Fraser]. *Tract. 8vo. vol. . Inverness, 1892. 8vo.*

INWOOD, W. Tables for the Purchasing of Estates, etc., 21st edit., together with F. Thoman's Logarithmic Tables of compound Interest and Annuities. *Lond. 1880. 8vo.*

IPSWICH.—*Ipswich Dock Commission.* Report of the Dredging and Ballasting Committee on the Improvement of the River near Wherstead Reach, etc. *Tract. 4to. vol. 112.*

Ipswich, 1888. 4to.

IPSWICH, *Queensland.* Branch line from Ipswich to Fassifern. (Report.) *Brisbane, 1879. folio.*

— Branch Line from Ipswich to Fassifern. Copies of all Reports by Surveyors and Engineers, from 1st Jan., 1877.

Brisbane, 1879. folio.

IRELAND.—[*Births, Deaths, and Marriages.*] First (second, etc.) annual Report of the Registrar General of Births, Deaths, and Marriages in Ireland. *Dublin, 1869, etc. 8vo. and folio.*

(The Reports for 1878–79 are wanting.)

— [*Bogs.*] Act for draining and allotting Bogs in Ireland.

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— Reports of the Commissioners on the nature and extent of Bogs in Ireland. 4 pts. *Lond. 1810–19. folio.*

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— [A collection of reports on the Drainage and Improvement of Lands in various districts of Ireland. Vols. .

Dublin, 18 . 8vo.

— Memorials of the Earls of Clanricarde and Clancarty, and reports of Mr. Grantham on the Drainage of Ireland.

Lond. 1831. folio.

— [*Fisheries.*] A Bill to amend the Fishery Acts.

Lond. 1888. folio.

- IRELAND.—[*Fisheries*].—*continued*. First and second Report of the Commission on Irish Fisheries. *Dublin*, 1836. folio.
- [Geological Survey.] See GEOLOGICAL SURVEY.
- [Harbours.] See PARLIAMENTARY PAPERS.—[HARBOURS.]
- [Inland Navigation.] Accounts relating to Inland Navigation and to the port of Dublin. *Lond.* 1806, 12, 18. folio.
- Act for grant for Inland Navigation in Ireland. *Lond.* 1816. folio.
- An Act to explain an Act made in the Parliament of Ireland . . . relative to Inland Navigations there, *etc.* *Lond.* 1815. folio.
- Facts and arguments respecting . . . Inland Navigation in Ireland; with an appendix containing the report of W. Jessop . . . respecting an artificial harbour for large vessels, in the bay of Dublin. By a Friend to National Industry. *Tract.* 8vo. vol. 10. *Dublin*, 1800.
- First and second reports on Inland Navigation in Ireland. *Lond.* 1813. folio.
- Papers relating to Inland Navigation. *Lond.* 1812–13.
- The State of Navigation in Ireland. *Tract.* 8vo. vol. 10. *Dublin*, 1810. 8vo.
- [Institution of Civil Engineers.] See INSTITUTION OF CIVIL ENGINEERS OF IRELAND.
- [Labourers' Dwellings.] Reports from Poor Law Inspectors in Ireland on Labourers' Dwellings. *Dublin*, 1873. 8vo.
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- [Names.] Special report on Surnames in Ireland, with notes as to numerical strength, derivation, *etc.* By R. E. Matheson. [Appendix to 29th Report of the Registrar General of Ireland.] *Lond.* 1894. folio.
- [Piers and Roads.] Report of the Commission appointed under the provisions of part II. of the Poor Relief (Ireland) Act, 1886. *Dublin*, 1887. folio.

- IRELAND—*continued*. [*Population*.] Abstract of the Population of Ireland according to the late Census . . . together with a comparative view of the number of houses and inhabitants as taken in 1813. *Lond.* 1822. folio.
- Abstract of the answers and returns made pursuant to an Act intituled "An Act to provide for taking an account of the Population of Ireland, and for ascertaining the increase or diminution thereof," 1821. *Lond.* 1823. folio.
- Abstract of answers and returns under the Population Acts, *etc.* Enumeration, 1831. *Lond.* 1833. folio.
- Report of the Commissioners appointed to take the Census of Ireland for 1841. *Lond.* 1843. folio.
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- — for the year 1861. 9 vols. *Lond.* 1862–64. folio.
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- — for the year 1881. 5 vols. *Lond.* 1881–82. folio.
- — for the year 1891. 5 vols. *Lond.* 1892. folio.
- [*Public Works*.] Reports of the Commissioners for the extension and improvement of Public Works in Ireland, with indexes. *Lond.* 1833, *etc.* folio.
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- Index, to 1809–1834. [*Lond.* 1835.] folio.
- First and second reports on advances made by Commissioners. *Lond.* 1835. folio.
- Report of the Board of Works (Ireland) Inquiry Committee. *Dublin*, 1878. folio.
- Public Works Commissioners. Correspondence on the Irish Reproductive Loan Fund Act, 1874. *Lond.* 1879. folio.
- First (Second) Reports of the Royal Commission on Irish Public Works, and Appendixes to first and second Reports containing minutes of Proceedings, *etc.* 2 vols. *Lond.* 1887–88. folio.
- [*Railways*.] Consolidation of Irish Railways. Letter to the Right Honourable the Earl of Derby, by a Member of the Institution of Civil Engineers. *Tract. 8vo. vol.* 234. *Dublin*, 1867. 8vo.
- First and second reports of the Commissioners on Railway Communications in Ireland. *Dublin*, 1837–38. folio.
- Irish Railways (Loans). *Lond.* 1872. folio.
- Railways (Ireland) Act, 1889. Return of copies of Orders in Council, and agreements. *Lond.* 1891. folio.
- Royal Commission on Railways in Ireland. Evidence and papers. *Lond.* 1866–68. folio.
- Railway Returns. *See* PARLIAMENTARY PAPERS.—[RAILWAYS.]

- IRELAND.—[*Railways*].—*continued*. Railways in Ireland. Report of the commissioners. (Atlas of plates.) *Lond.* 1868. folio.
- [Roads.] A Bill for amending the Irish Road Acts. *Lond.* 1809. folio.
- A Bill to amend an Act of the last session of Parliament, for amending the Irish Road Acts. *Lond.* 1810. folio.
- [Royal College of Science.] See ROYAL COLLEGE OF SCIENCE FOR IRELAND.
- [Royal Geological Society.] See ROYAL GEOLOGICAL SOCIETY OF IRELAND.
- [Royal University.] See ROYAL UNIVERSITY OF IRELAND.
- [Stage Coaches.] A Bill to repeal certain parts of four Acts of the Parliament of Ireland, made in the 33rd, 35th, 38th, and 39th years of His present Majesty, so far as relate to the limiting the number of persons to be carried by Stage Coaches; for enacting other Limitations in lieu thereof; and for other purposes relating thereto. *Lond.* 1810. folio.
- [Tramways.] Tramway map of Ireland. *Tract.* 8vo. vol. 383. *Dublin*, 1884. 8vo.
- IRELAND, A. Address on the Moral Influence of Free Libraries, etc. *Tract.* 8vo. vol. 508. *Manchester*, 1892. 8vo.
- IRISH ACADEMY. See ROYAL IRISH ACADEMY.
- IRISH GREAT WESTERN RAILWAY. Digest of evidence received by the select committee of the House of Commons, appointed to inquire into the merits of the bill for the Irish Great Western Railway (Dublin to Galway). *Tract.* 8vo. vol. 73. 8vo.
- IRON AND STEEL INSTITUTE. Transactions. 1869–70. 2 vols. in 1. *Newcastle-upon-Tyne*, 1859. 8vo.
- Guide to Chester. Chester Meeting of the Iron and Steel Institute. Visits and excursions. *Tract.* 4to. vol. 414. *Lond.* 1884. 4to.
- The Iron and Steel Institute in America in 1890. Special volume of "Proceedings." *Lond.* [1892.] 8vo.
- Journal. Vol. 1, 1870, (Vol. 2, 1871, etc.) *Lond.* 1871, etc. 8vo.
- Meeting at Dusseldorf. Guide to the Exhibition of Art and Industry. *Dusseldorf*, 1880. 8vo.
- Notes on the Industries of Cleveland and South Durham: prepared for the use of the Iron and Steel Institute at their autumn meeting. *Tract.* 8vo. vol. 402. *Middlesbrough*, 1885. 8vo.
- Proceedings of the Iron and Steel Manufacturers and Iron Ore Producers at Cresson. *Philadelphia*, 1882. 8vo.
- Railway map issued on the occasion of the Meeting at Dusseldorf. *Dusseldorf*, 1880. 8vo.
- Report on the Progress of the Iron and Steel Industries in Foreign Countries. By J. Deby. *Newcastle-upon-Tyne*, 1878. 8vo.
- Subject-Matter Index to Proceedings, 1882–1889. *Lond.* 1891. 8vo.

- IRON AND STEEL WIRE MANUFACTURERS' ASSOCIATION. Imperial Standard Wire Gauge: table of sizes, weights, lengths, and breaking strains of Iron Wire. *Tract. folio. vol. 42.* 1884. folio.
- IRONMONGERS' HALL. Catalogue of the antiquities and works of art exhibited at Ironmongers' Hall in May 1861: compiled by the Committee of the Council of the London and Middlesex Archaeological Society. 2 vols. *Lond. 1869. 4to.*
- IRVINE, R. Note on the Condensation of Carbon Particles in Smoke. *Tract. 8vo. vol. .* *Lond. 1889. 8vo.*
- On the Corrosion of Iron. *Tract. 8vo. vol. .* *Lond. 1891. 8vo.*
- IRVING, R. D. The Copper-bearing Rocks of Lake Superior. [*U.S. Geol. Survey. Monograph V.*] *Washington, 1883. 4to.*
- IRVING, R. D., and CHAMBERLIN, T. C. Observations on the junction between the Eastern Sandstone and the Keweenaw Series on Keweenaw Point. [*U.S. Geol. Survey. Bulletin No. 23.*] *Washington, 1885. 8vo.*
- IRVING, R. D., and VAN HISE, C. R. On Secondary Enlargements of Mineral Fragments in Certain Rocks. [*U.S. Geol. Survey. Bulletin No. 8.*] *Washington, 1884. 8vo.*
- IRWELL RIVER. Map of the Mersey and Irwell and their tributaries, 1877. Rivers Pollution Prevention Act, 1876. 1877. 8vo.
- Mersey and Irwell Watershed. Proceedings of Joint Committee. 1891-93. See MERSEY River.
- ISAACS, L. H. A practical Treatise on Sewerage and Drainage, etc. *Lond. 1859. 8vo.*
- Board of Works.—Holborn District. Charterhouse Market. North London Tramways. *Tract. folio. vol. 13.* *Lond. 1870. folio.*
- Report on the application of the Artizans Dwellings Bill to the courts and alleys of Gray's Inn Lane. *Tract. 8vo. vol. 247.* *Lond. 1875. 8vo.*
- ISCHIA. Rapport sur les prescriptions administratives concernant l'île d'Ischia. *Tract. 8vo. vol. 456.* *Paris, 1884. 8vo.*
- Relazione della Commissione per le prescrizioni edilizie dell' isola d' Ischia istituita . . . dopo il terremoto del luglio 1883. *Tract. 4to. vol. 91.* *Roma, 1883. 4to.*
- Relazione della Commissione per le prescrizioni edilizie. *Tract. 8vo. vol. 410.* *Roma, 1883. 8vo.*
- ISHERWOOD, B. F. An Account of the comparable Experiments made to ascertain the economic effect of using in a Non-condensing Engine saturated Steam alone, and of using it mixed with compressed hot air according to the system of Mr. E. M. Strange. *Tract. 8vo. vol. 422.* 1886. 8vo.
- Account of the Experiments made on a Condensing Compound Engine, by a committee of the Industrial Society of Mulhouse. [*Philadelphia,*] 1885. 8vo.

- ISHERWOOD, B. F.—*continued*. Account of the Experiments made on the Double Screw Steel Ferry Boat "Bergen," etc. *Tract*. 8vo. vol. 493. [Washington,] 1890. 8vo.
- Analysis of the results of the Experiments made on the paddle-wheel steamer "Ville de Douvres," etc. *Tract*. 8vo. vol. 528. [Washington, 1892.] 8vo.
- Analysis of the results of Experiments made with the Orvis system of increasing the economic vaporization of Steam Boilers and of preventing smoke in their furnaces. *Tract*. 8vo. vol. 529. [Washington, 1891.] 8vo.
- Digest of Prof. C. H. Peabody's Experiment with the G. F. Blake Manufacturing Company's Pumping Engine supplying water to the City of Newton, Mass. *Tract*. 8vo. vol. 533. Annapolis, 1893. 8vo.
- Engineering Precedents for Steam Machinery; embracing the performances of steamships, experiments with propelling instruments, condensers, boilers, etc. 2 vols. New York, 1859. 8vo.
- Ericsson compound Engine and Belleville Boiler. *Tract*. 8vo. vol. 492. [Washington,] 1890. 8vo.
- Experimental Comparison of a Single-cylinder Engine with a Triple-expansion Engine. *Tract*. 8vo. vol. 512. [Washington, 1893.] 8vo.
- Experimental Researches in Steam Engineering. 2 vols. Philadelphia, 1863–65. 4to.
- Experiments . . . to determine the relative Economic Efficiency, in proportion of weight of steam used to weight of water lifted, of a Reciprocating Pump, a Rotary Pump, and a Steam Siphon Pump, etc. *Tract*. 8vo. vol. 489. Philadelphia, 1889. 8vo.
- An Exposition of the Mode in which Water is affected by a Body moving in it. *Tract*. 8vo. vol. 490. 1889. 8vo.
- An Investigation of some Experiments on a Centrifugal Blower delivering Air into the Atmosphere at large. *Tract*. 8vo. vol. 484. 1889. 8vo.
- Investigation [of the effect of Shoal Water on Speeds of Ships, etc.]. *Tract*. 8vo. vol. 528. [Washington,] 1892. 8vo.
- Pipe Boilers versus Shell Boilers for naval service. *Tract*. 8vo. vol. 492. [Washington,] 1890. 8vo.
- The Processes of Steam in its development of Power by means of a Steam Engine. *Tract*. 8vo. vol. 492. Philadelphia, 1889. 8vo.
- Progressive Trials of the Steam Barge of the Commandant of the New York Navy Yard. *Tract*. 8vo. vol. 484. [Washington,] 1889. 8vo.
- Report made to the Bureau of Steam Engineering, Navy Department . . . 1883, on the hull, engine, and boiler of the steam-yacht "Siesta," etc. *Tract*. 8vo. vol. 470. Washington, 1883. 8vo.
- Report to the National Superheated Water Company on the Prall System of supplying Heat for cooking, heating, and steam power. *Tract*. 8vo. vol. 437. 1887. 8vo.

- ISHERWOOD, B. F.—*continued*. The Steam-Jacket: its genesis, its purpose, etc. *Tract. 8vo. vol. 512.* [New York, 1893.] 8vo.
- The United States Torpedo-boat "Cushing" and its experiments investigated. *Tract. 8vo. vol. 528.* [Washington,] 1892. 8vo.
- ISIS, River. Bye-laws, etc. 1804. See THAMES, River.
- ISLE OF WIGHT RAILWAY. Reports . . . from the Select Committee on the Caledonian Railway (Conversion of Stock) Bill . . . and the Isle of Wight Railway Bill, etc. *Lond. 1890. folio.*
- ISSALÈNE, E. Manuel pratique militaire des chemins de fer. *Paris, 1873. 8vo.*
- ISTITUTO LOMBARDO. See REALE ISTITUTO LOMBARDO.
- ISTITUTO VENETO. See REALE ISTITUTO VENETO.
- ITALY.—[*Agriculture.*] Annali di agricoltura. *Roma, Firenze, 1886, 88. 8vo.*
- [Bridges and Roads.] Relazioni della direzione generale di ponti e strade. *Roma, 1872. 4to.*
- Raccolta delle leggi rifletenti i ponti e le strade ordinarie del regno d'Italia dal 1860 al 1883. *Tract. 8vo. vol. 359. Roma, 1884. 8vo.*
- [Customs.] Atti della Commissione d'inchiesta per la revisione della tariffa doganale. *Roma, 1885. 4to.*
- [Harbours.] Album dei porti di Italia. I., II., III. classe. (Official.) *Roma, 1873. folio.*
- Della sistemazione dei principali porti. 1873. *Tract. 4to. vol. 73. Roma, 1873. 4to.*
- Elenco dei porti marittimi e lacuali del regno secondo la loro nuova classificazione a termini della legge 16 luglio, 1884, etc. *Roma, 1889. 8vo.*
- Relazione sull' esecuzione delle leggi speciali emanate pei porti dal 1860 sino al 1870. *Roma, 1871. 4to.*
- Rendiconti delle spese fatte per opere nuove eseguite nei porti durante 1871. *Roma, 1871. folio.*
- [Hydraulics.] Appendice alle raccolte di leggi, decreti e circolari sui servizi affidati alla Direzione generale delle opere idrauliche. *Roma, 1891. 8vo.*
- Relazione sui servizi idraulici pel biennio finanziario 1875-76, (1888-90.) *Roma, 1877, 91. 4to.*
- Relazione sul servizio delle opere idrauliche e di quelle di bonificazione dal 1867 al 1871. *Tract. 4to. vol. 76. Roma, 1873. 4to.*
- [Hydrography.] Carta idrografica d'Italia. *Roma, 1888-92. 8vo.*
- L' Aniene, etc.
 Atti della Commissione idraulica; verbali delle adunanze del . . . luglio 1890, e . . . aprile 1891.
 Cenni sulle bonificazioni nelle provincie Venete ed in quella di Mantova. Emilia. 2 pt.
 Irrigazione della provincia di Bergamo.

ITALY.—[*Hydrography.*] Carta idrografica d' Italia—*continued.*

Irrigazione del Piemonte. Canali demaniali d'irrigazione nelle provincie

di Torino, Novara, Pavia ed Alessandria.

Le irrigazioni nell' Egitto.

Lazio.

Nera e Velino. (Atlas of plates.)

Regione meridionale Adriatica.

Regione meridionale Mediterranea.

Sicilia.

- [*Lighthouses.*] Album dei fari, illustrato dalle notizie intorno al loro caratteri e posizione non che da quelle intorno alle spese di costruzione ed impianto e di annuo loro mantenimento ed illuminazione. *Roma*, 1873. folio.
- Ministero dei lavori pubblici. Elenco dei fari e fanali al 1° gennaio 1891. *Roma*, 1891. 4to.
- Quadro dei fari e dei fanali delle coste d' Italia. *Tract.* 8vo. vol. 251. *Firenze*, 1870. 8vo.
- [*Maritime Works.*] Raccolta di leggi, decreti e circolari sul servizio delle opere marittime. *Roma*, 1887. 8vo.
- [*Marshes.*] Raccolta di leggi, decreti e regolamenti sulle opere di bonificazione dei terreni paludosi in Italia. *Napoli*, 1878. 8vo.
- [*Mines.*] Notizie statistiche sulla industria mineraria in Italia dal 1860 al 1880. *Roma*, 1881. 8vo.
- [*Public Works.*] Raccolta di leggi, regolamenti e discipline ad uso de' magistrati e del corpo degl' ingegneri d' acque e strade, etc. 2 vols. *Milano*, 1806-7. 8vo.
- Legge sui lavori pubblici. *Tract.* 8vo. vol. 338. *Torino*, 1865. 8vo.
- L' amministrazione dei lavori pubblici in Italia dal 1860 al 1867. *Firenze*, 1867. 8vo.
- Relazione intorno alle bonifiche. *Roma*, 1873. 4to.
- Relazione generale sui cenni monografici dei singoli servizi dipendenti dal Ministero dei lavori pubblici compilati in occasione della Esposizione universale di Parigi dell' anno 1878. 12 parts. *Roma*, 1878. folio.
- [*Railways.*] Atti della commissione d' inchiesta sull' esercizio delle ferrovie italiane. 3 vols. in 7. *Roma*, 1881. 4to.
- Costruzione di nuove linee . . . Discussione del progetto di legge. 2 vols. *Roma*, 1879. 4to.
- Delle costruzioni ferroviarie a conto dello Stato ; Delle costruzioni delle strade ferrate concesse all' industria privata ; Dell' esercizio delle ferrovie dello strato e sociali. *Roma*, 1873. 4to.
- Disposizioni e studi sulla esecuzione della legge 29 luglio, 1879, no. 5002 per la costruzione di nuove linee di completamento della rete ferroviaria del Regno. *Tract.* 4to. vol. 89. *Roma*, 1879. 4to.
- Esercizio delle ferrovie italiane. 1882-83. 4to.

ITALY.—[*Railways*].—*continued*. Raccolta delle leggi e decreti relativi alla costruzione delle strade ferrate governative e di quelle concesse all'industria privata nel regno d'Italia.

Torino, 1862. 4to.

— Relazione della commissione governativa Italiana a S. E. il Ministro, &c. Sul piano inclinato di Lanslebourg a trazione funicolare secondo il sistema "T. Agudio." *Tract.* 8vo. vol. 303.

Roma, 1876. 8vo.

— Relazione statistica sulle costruzione e sull'esercizio delle strade ferrate italiane 1875, etc.

Roma, 1876, etc. 4to.

— Relazione statistica sulle costruzioni ferroviarie a carico dello Stato per 1871.

Roma, 1872. 4to.

— Relazione sugli studi fatti dalla Commissione dello armamento e della sopra-struttura delle ferrovie. *Tract.* 4to. vol. 80.

Roma, 1877. 4to.

— Relazione sulle strade ferrate italiane.

Firenze, 1869. 4to.

— Report from Captain Tyler, R.E., to H. M. Postmaster-General of his recent inspection of the Railways and Ports of Italy, with reference to the use of the Italian route for the conveyance of the Eastern mails.

Lond. 1866. folio.

— Senato del Regno, 1878-79, (1882-83.) Provvedimenti per la costruzione di nuove linee di complemento della rete ferroviaria del Regno. Atti parlamentari.

[Roma,] 1878-83. 4to.

— Lo Stato e le ferrovie. *Tract.* 8vo. vol. 345. Roma, 1876. 8vo.

— Sul riscatto ed esercizio delle ferrovie italiane. *Tract.* 8vo. vol. 340.

Roma, 1876. 8vo.

— Tariffe e condizioni pei trasporti sulle ferrate. Tariffe generali, tariffe normali a base differenziali, nomenclatura e classificazione delle merci.

1882. 4to.

— Tariffe e condizioni pei trasporti sulle strade ferrate, Tariffe speciali comuni.

1882-83. 4to.

— [*Rivers.*] Relazione generale sulle piene dei fiumi nell'autunno dell'anno 1872.

1873. 4to.

— [*Roads.*] Relazione sulle strade comunali obbligatorie per l'anno 1871 (1873). 4 vols.

Roma, 1872-74. 4to.

— See also *supra* :—[*Bridges and Roads.*]

— [*States of the Church.*] Tariffa generale delle gabelle tassative che se dovranno esigere nelle dogane dello Stato Ecclesiastico.

Roma, 1815. 4to.

— [*Statistics.*] Annuario statistico Italiano, 1884.

Roma, 1884. 8vo.

— [*Watercourses.*] Relazione pei servizi dei corsi d'acqua di prima e seconda categoria per l'anno 1872. *Tract.* 4to. vol. 76.

Roma, 1873.

ITCHIN, *River*. Amended Acts for the improvement of the River Itchin.

Lond. 1795-1820. folio.

- ITZELES, L. Donauregulirung und Kettenschiffahrt. *Tract.* 8vo. vol. 357. *Wien*, 1883. 8vo.
- Die Elbe. Reise-Bericht über die Stromschau des Elbe-Vereines. *Tract.* 8vo. vol. 471. *Wien*, 1884. 8vo.
- Die Regulierungskosten der Donau. *Tract.* 8vo. vol. 342. *Wien*, 1880. 8vo.
- Schiffahrtscanal-Projecte aus der Josefinischen Zeit und deren Verwendbarkeit für die Gegenwart. *Tract.* 8vo. vol. 357. *Wien*, 1882. 8vo.
- Tarifkrieg, Tariffriede. *Tract.* 8vo. vol. 356. *Wien*, 1883. 8vo.
- IVATTS, E. B. The Handbook of Railway Station Management, etc. *Liverpool*, 1861. 8vo.
- Railway Management at Stations. 2nd edition. *Lond.* 1887. 8vo.
- Origin of the Train Staff. *Tract.* 8vo. vol. 463. *Dublin*, 1888. 8vo.
- IVELCHESTER. Ivelchester and Langport Navigation Act. *Lond.* 1795. folio.
- IVES, F. E. Handbook to the Photochromoscope . . . With chapters on the nature of Light, and theory of Colour, etc. *Tract.* 8vo. vol. 536. *Lond.* 1894. 8vo.
- IVESON, —. Horse Power Diagrams. *Lond.* 1875. folio.

J.

- JACK, R. L. Catalogue of Works, papers, reports and maps on the Geology . . . of the Australian Continent, *etc.* 1881. *See* ETHERIDGE, R., and JACK, R. L.
- JACKSON, —. The Townsend Furnace and Machine Shop. *See* TOWNSEND, —, and JACKSON, —.
- JACKSON, A. W. On the Building Stones of California. *Berkeley*, 1888. 8vo.
- JACKSON, C. The practical Arbitrator: a treatise designed more particularly for lay arbitrators. *Lond.* 1879. 8vo.
- JACKSON, D. C. A Text-book on Electro-Magnetism and the construction of Dynamos. Vol. 1. *New York*, 1893, *etc.* 8vo.
(This work is in progress.)
- JACKSON, F. Plan of the Town and County of Nottingham, and the several extra parochial places within the liberties of the Castle, . . . from surveys made between the years 1851 and 1861. *Nottingham*, 1861. 8vo.
- JACKSON, G. B. W. Description of the Great North Holland Canal . . . With an account of gaining land from the sea by Polders, and of the art of building with Fascine Work. *Tract. 8vo. vol. 498.*
(From Min. Proc. Inst. C.E.) *Lond.* 1846. 8vo.
- JACKSON, J. Lubrication and Lubricating Oils. 1886, *etc.* *See* MACARTHUR, J. G., and JACKSON, J.
- JACKSON, L. D'A. Aid to Engineering Solution. *Lond.* 1885. 8vo.
- Aid to Survey Practice. *Lond.* 1880. 8vo.
- Canal and Culvert Tables, based on the formula of Kutter, under a modified classification: with . . . examples. *Lond.* 1878. 8vo.
- A Curve-book, containing descriptions of every practical method of setting out Curves of Roads, Railways and Canals, with formulæ, *etc.* *Madras*, 1870. 16mo.
- Hydraulic Manual, *etc.* *Lond.* 1875. 8vo.
- 4th edition . . . enlarged. *Lond.* 1883. 8vo.
- Modern Metrology: a manual of the Metrical Units and Systems of the present century. *Lond.* 1882. 8vo.
- Simplified Weights and Measures, on a natural system applicable to most civilized nations. *Lond.* 1876. 8vo.
- Statistics of Hydraulic Works and Hydrology of England, Canada, Egypt, and India. *Lond.* 1885. 8vo.
- JACKSON, M. B. A scheme for the Supply of Water to the towns of Sheffield, Rotherham-cum-Kimberworth and Doncaster, with provision for the future supply of Chesterfield, *etc.* *Tract. 8vo. vol. 151.* *Westminster*, 1866. 8vo.

- JACKSON, T. *The Tourist's Guide to the Britannia Bridge. Tract. 8vo. vol. 183. Lond. 1850. 8vo.*
- JACOB, A. *Practical Designing of Retaining-walls. Tract. 8vo. vol. 158. Dublin, 1867. 8vo.*
- *Remarks on the treatment and disposal of Town Sewage. Tract. 8vo. vol. 156. Lond. 1867. 8vo.*
- JACOB, Sir G. L. *Taylor's Student's Manual of Indian history and the Edinburgh Review. Tract. 8vo. vol. 295. Lond. 1877. 8vo.*
- JACOB, JOHN, Major. *Major Jacob's complaint against certain remarks of the Punjab Board of Administration. [Records of the Govt. of India (Foreign Dep.) No. 20.] Calcutta, 1856. 8vo.*
- JACOB, JOSEPH. *Observations on the structure and draught of Wheel-Carriages. Lond. 1773. 4to.*
- JACOB, S. S., Col. *Jeypore Portfolio of Architectural Details. 6 parts. Lond. 1890. folio.*
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| Cappings and Plinths.
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|---------------------------------------------|--------------------------------------|
- JACOBI, C. F. A. *De triangulorum rectilineorum proprietatibus quibusdam nondum satis cognitis. Tract. 4to. vol. 77. Leipzig, 1825. 4to.*
- JACOBSTHAL, E. *Rückblicke auf die baukünstlerischen Prinzipien Schinkels und Böttichers. Tract. 4to. vol. 112. Berlin, 1890. 8vo.*
- JACOBUS, D. S. *The Effective Area of Screws. Tract. 8vo. vol. . [New York, 1890.] 8vo.*
- *General Solution of the Transmission of Force in a Steam Engine, as influenced by the action of friction, acceleration, and gravity. Tract. 8vo. vol. 492. [New York, 1890.] 8vo.*
- *Influence of Steam-Jackets of the Pawtucket Pumping Engine. Tract. 8vo. vol. . [New York, 1890.] 8vo.*
- JACQMIN, F. *De l'exploitation des chemins de fer, etc. 2 vols. Paris, 1868. 8vo.*
- *Des machines à vapeur, etc. 2 vols. Paris, 1870. 8vo.*
- JACQUELIN, G. *Notes d'un transporteur par eau. (Exposition Universelle de 1889. Congrès international d'utilisation des eaux.) Tract. 8vo. vol. 477. Paris, 1889. 8vo.*
(Lithographed.)
- JACQUEZ, E. *Dictionnaire d'électricité et de magnétisme avec la synonyme française, allemande et anglaise. Paris, 1883. 8vo.*
- JAEGER, G. *Essays on Health-culture. Translated and edited by L. R. S. Tomalin . . . Enlarged edition. Lond. 1887. 8vo.*
- JAEGER, R. *A new Pocket-dictionary of the English and Dutch and Dutch and English languages; containing also a vocabulary of proper names, and a catalogue of the irregular verbs. Gouda, [1865?] 12mo.*

- JAGNAUX, R. *Traité de chimie générale analytique et appliquée.*
4 vols. *Paris*, 1887. 8vo.
- JAHN, H. *Die Elektrolise und ihre Bedeutung für die theoretische und angewandte Chemie.* *Tract.* 8vo. vol. 352.
Wien, 1883. 8vo.
- JAHN, H. B. *Karte des Nord-Ostsee-Kanals nach den Beschlüssen des deutschen Reichstages.*
Kiel, 1886. 8vo.
- JAL, A. *Archéologie navale.* 2 vols. *Paris*, 1840. 8vo.
- JAMAR, D. J. *A brief Review of the Treaty Negotiations between Spain and England: translated by R. H. Graham.* *Tract.* 8vo. vol. 355.
Madrid, 1882. 8vo.
- JAMES, E. J. *The Canal and the Railway: with a note on the development of Railway Passenger Traffic.* *Tract.* 8vo. vol. 494.
Baltimore, 1890. 8vo.
- *The Relation of the Modern Municipality to the Gas Supply.* *Tract.* 8vo. vol. 425.
Baltimore, 1886. 8vo.
- JAMES, Sir H. *Abstracts from Meteorological Observations taken in the years 1860–61, at the Royal Engineer Office, New Westminster, British Columbia.* *Tract.* 4to. vol. 45.
Lond. 1862. 4to.
- *Abstracts from the meteorological observations taken at the stations of the Royal Engineers in the years 1853–54 (1853–59), etc.*
Lond. 1855, 62. 4to.
- *Account of the Methods and processes adopted for the production of the Maps of the Ordnance Survey of the United Kingdom.*
Lond. 1875. 4to.
- *Catalogue of the Maps and Plans and other Publications of the Ordnance Survey of England and Wales (Ireland, Scotland) to 31st December, 1862.* *Tract.* 8vo. vol. 139.
Lond. 1863. 8vo.
- *Comparisons of the Standards of Length of England, France, Belgium, Prussia, Russia, India, Australia, made at the Ordnance Survey Office by Captain A. R. Clarke.* *Lond.* 1866. 4to.
- *Extension of the Triangulation of the Ordnance Survey into France and Belgium, with the measurement of an arc of parallel in latitude 52° N. from Valentia in Ireland to Mount Kemmel in Belgium.*
Lond. 1863. 4to.
- *Instructions for taking Meteorological Observations; with tables for their correction, etc.* *Lond.* 1860. 8vo.
- *Notes on the great Pyramid of Egypt, and the Cubits used in its design.* *Tract.* 4to. vol. 62. *Southampton*, 1869. 4to.
- *Ordnance Survey. Abstracts of the principal lines of spirit levelling in England and Wales (Scotland, Ireland).*
Lond. 1855–61. 4to.
- *Photo-zincography.* *Tract.* 8vo. vol. 122.
Southampton, 1860. 8vo.

- JAMES, J.** A short Review on the several Pamphlets and Schemes that have been offered to the publick, in relation to the building of a Bridge at Westminster, *etc.* *Tract.* 8vo. vol. 169.
Lond. 1736. 8vo.
- JAMES, J. H.** A Guide to the formation and management of Friendly Societies for Assurance, Investment, and Emigration : with rules, forms, and tables. *Lond.* 1851. 8vo.
- JAMES, S. H.** Dismasting of large iron Sailing Ships. *Tract.* 4to. vol. 73. 1874. 4to.
- Pollution of Rivers, and Purification of Sewage by James' Air Process. *Tract. folio.* vol. 37. *Lond.* 1885. folio.
- JAMES, W.** Report, or Essay, to illustrate the advantages of direct Inland Communication through Kent, Surrey, Sussex, and Hants, to connect the metropolis with the ports of Shoreham (Brighton), Rochester (Chatham), and Portsmouth, by a line of engine railroad, *etc.* *Tract.* 8vo. vol. 1. *Lond.* 1823. 8vo.
- Two Plans of the London-dock ; with some observations respecting the river, immediately connected with docks in general, and of the improvement of navigation. *Tract.* 8vo. vol. 213.
Lond. 1795. 8vo.
- JAMES, W., and W. H.** The two Jameses and the two Stephenson's : or, the earliest history of passenger transit on Railways. By E. M. S. P. *Lond.* 1861. 8vo.
- JAMES RIVER AND KANAWHA COMPANY.** Fifth, (forty-fifth) annual Report. *Richmond, U.S.A.,* 1839, 75. 8vo.
- Transportation to the Sea-Board. The central route from the Mississippi River to the Atlantic Ocean by the Ohio. *Tract.* 8vo. vol. 261. *Richmond,* 1874. 8vo.
- JAMESON, R.** An Outline of the Mineralogy of the Shetland Islands and of the Island of Arran. With an appendix on peat, kelp, and coal. *Edinburgh,* 1798. 8vo.
- JAMET, V.** Traité de mécanique à l'usage des candidats à l'École polytechnique. *Paris,* 1893. 8vo.
- JAMIESON, ALEXANDER.** A Celestial Atlas, comprising a systematic display of the heavens in a series of thirty maps, *etc.*
Lond. 1822. 4to.
- The Engineer and Machinist's Assistant, *etc.* 1847. See SCOTT, D., and JAMIESON, A.
- Reports on the Coal Mines and Iron Ores in the Asturias in Spain. 1843. See FORSTER, M., COOPER, J. T., and JAMIESON, A.
- A treatise on the Construction of Maps ; in which the principles of the Projections of the Sphere are demonstrated, and their various practical relations to Mathematical Geography deduced and explained, *etc.* *Lond.* 1814. 8vo.
- Mechanics of Fluids for practical men, comprising Hydrostatics, descriptive and constructive. *Lond.* 1837. 8vo.

- JAMIESON, ANDREW, *Prof.* Comparative tests of Hellesen and E. C. C. Dry Battery Cells. *Tract.* 8vo. vol. 517.
[Glasgow, 1893.] 8vo.
- The History of Selenium and its action in the Bell Photophone, *etc.* *Tract.* 8vo. vol. 329. [Glasgow, 1881.] 8vo.
- The Laying and Repairing of Submarine Telegraph Cables. *Tract.* 8vo. vol. 337. Glasgow, 1881. 8vo.
- On the Designing of Continuous Current Dynamo Machines. *Tract.* 8vo. vol. 479. Glasgow, 1889. 8vo.
- — [Another edition.] Washington, 1890. 8vo.
- On the Electric Lighting of Public Buildings: with special reference to the Athenæum electric light installation. *Tract.* 8vo. vol. 515. Glasgow, 1891. 8vo.
- A Pocket-book of Electrical Rules, *etc.* 1886. See MUNRO, J., and JAMIESON, A.
- Report on inspection and tests of Brown's Patent Rotary Expansive Engine. *Tract.* 8vo. vol. 512. Glasgow, 1891. 8vo.
- Report on tests of a "Griffin" Patent Double-Acting Horizontal Gas Engine. *Tract.* 4to. vol. 108. Lond. 1888. 4to.
- A Text-Book on Steam and Steam-Engines. Lond. 1886. 8vo.
- — 7th edition. Lond. 1892. 8vo.
- JAMIN, J. Cours de physique de l'École Polytechnique. 3 vols. Paris, 1858–66. 8vo.
- — 3^{me} édition, augmentée . . . par Jamin et Bouty. 3 vols. Paris, 1882–86. 8vo.
- L'éclairage électrique. *Tract.* 8vo. vol. 290. Paris, 1878. 8vo.
- JANICKI, S. Note sur les divers moyens employés pour améliorer les conditions de navigabilité des rivières. *Tract.* 8vo. vol. 322. Paris, 1880. 8vo.
- JANIN, L. Report on some of the leading Mining Claims of the Whitewood Mining District in the Black Hills, Lawrence County, Da. *Tract.* 4to. vol. 92. S. Francisco, 1879. 4to.
- JANOYER, J. Fabrication des fontes Bessemer et leur conversion en acier. *Tract.* 8vo. vol. 255. Paris, 1873. 8vo.
- JAPAN. First annual report of the director of the Imperial Mint, Osaka, Japan. *Tract.* 8vo. vol. 233. 1872. 8vo.
- Reports on the Manufacture of Paper in Japan. Lond. 1871. folio.
- Table of the principal Bridges and Tunnels on the Imperial Railways of Japan. [Tokio, 1891.] s. sh. 4to.
- *Seismological Society.* See SEISMOLOGICAL SOCIETY OF JAPAN.
- JAPAN MAIL STEAM SHIP COMPANY. Tracks of the N. Y. K. Regular Lines. *Tract.* folio. vol. 45. Tokyo, 1890. folio.

- JAPING, E. Die elektrische Kraftübertragung und ihre Anwendung in der Praxis. *Wien*, 1883. 8vo.
- Die Elektrolyse. *Wien*, 1883. 8vo.
- L'électrolyse, la galvanoplastie et l'électrométallurgie. *Paris*, 1885. 8vo.
- Le transport de la force par l'électricité, et ses applications industrielles. *Paris*, 1885. 8vo.
- JAQUES, W. H. Bethlehem Armor and recent armor experiments at the Naval Ordnance Proving Ground, Annapolis, Md. *Tract. 4to. vol. 118.* 1891. 4to.
- The detachable Ram. *Tract. 8vo. vol. 527.* *South Bethlehem, Pa.*, 1892. 8vo.
- Ericsson's Destroyer and Submarine Gun. *Tract. 8vo. vol. 419.* *Lond.* 1885. 8vo.
- The Establishment of Steel Gun Factories in the United States. *Annapolis*, 1884. 8vo.
- Heavy Ordnance for National Defence. *Tract. 8vo. vol. 424.* *New York*, 1885. 8vo.
- Modern Armor for National Defence. *Tract. 8vo. vol. 424.* *New York*, 1886. 8vo.
- Present development of Heavy Ordnance in the United States. *Tract. 8vo. vol. 527.* *Philadelphia*, 1893. 8vo.
(From the "Journal of the Franklin Institute.")
- Torpedoes for National Defence. *Tract. 8vo. vol. 424.* *New York*, 1886. 8vo.
- Torpedoes, Torpedo Vessels, and Torpedo Warfare. *Tract. 8vo. vol. 464.* 1888. 8vo.
- Trial of 11½-Inch all-steel Armor Plate at the Naval Ordnance Proving Ground, Annapolis. [*New York*,] 1891. 4to.
- JARMAIN, G. Cantor Lectures on Wool Dyeing, etc. *Lond.* 1876. 8vo.
- JAUNEZ, —. Guide du chauffeur et du propriétaire des machines à vapeur. 1840. See GROUVELLE, P., and JAUNEZ, —.
- JEAFFRESON, J. C. The Life of R. Stephenson. With descriptive chapters on some of his most important professional works by W. Pole. 2 vols. *Lond.* 1864. 8vo.
- JEANNERET, H. De la guérison prompte et facile du choléra asiatique. *Tract. 8vo. vol. 156.* 1865. 8vo.
- Epidemic Cholera, diarrhoea, and dysentery: pointing out an effectual and expeditious method of cure, etc. *Tract. 8vo. vol. 156.* *Lond.* 1857. 8vo.
- JEANNETTE, *Steamer*. Loss of the steamer Jeannette. (Official Report.) *Washington*, 1883. 8vo.
- JEANS, Rev. G. Practical Astronomy for the Unlearned. *Lond.* 1841. 8vo.

JEANS, H. W. Nautical Astronomy and Navigation. 2 parts.
Lond. 1876, 84. 8vo.

(Part 1, 3rd edition ; Part 2, 5th edition.)

— Problems in Astronomy, Surveying and Navigation : with their solutions. New edition. *Lond.* 1849. 8vo.

JEANS, J. S. Jubilee Memorial of the Railway System. A history of the Stockton and Darlington Railway, and a record of its results.
Lond. 1875. 8vo.

— Railway Problems : an inquiry into the economic conditions of Railway Working in different Countries. *Lond.* 1887. 8vo.

— Steel : its history, manufacture, properties and uses.
Lond. 1880. 8vo.

JEANS, W. T. The Creators of the Age of Steel. *Lond.* 1884. 8vo.

— Lives of the Electricians : Professors Tyndall, Wheatstone and Morse.
Lond. 1887. 8vo.

JEARRARD, C. An Extract from the "Pozzolane Guide" for the purchase and use of the patent English Pozzolane, for building and stucco work. *Tract.* 8vo. vol. 15. *Lond.* 1824. 8vo.

JEBB, R. Report . . . upon the system of Drainage pursued in the Metropolis. *Tract.* 8vo. vol. 108. *Lond.* 1854. 8vo.

JEE, A. S. Description of an Iron Viaduct, erected at Manchester [on the joint Station of the London and North Western and Manchester, Sheffield and Lincolnshire Railways]. *Tract.* 8vo. vol. 499.
 (From Min. Proc. Inst. C.E.) *Lond.* 1854. 8vo.

— Description of the Dinting Vale Viaduct on the . . . Sheffield and Manchester Railway. *Tract.* 8vo. vol. 499.
 (From Min. Proc. Inst. C.E.) *Lond.* 1846. 8vo.

JEEP, W. Der Bau der Pumpen und Spritzen. (Atlas of plates.)
Leipzig, 1871. 8vo. and 4to.

JEFFCOCK, Rev. J. T. A Memoir of Parkin Jeffcock, civil and mining engineer.
Lond. 1867. 8vo.

JEFFERDS, M. R. The Goodfellow and Cushman light weight, high capacity tubular frame Freight Cars. *Tract.* 8vo. vol. 490.
Middlesbrough, 1890. 8vo.

JEFFERS, W. N. Nautical Surveying. *New York*, 1878. 8vo.

JEFFERSON, J. C., and PULLON, J. T. A Description of the proposed elevated Single Rail Railway to Roundhay Park. *Tract.* 8vo. vol. 458.
Leeds, 1887. 8vo.

JEFFERY, A. Notes on the Marine Glue. *Tract.* 8vo. vol. 67.
Lond. 1843. 8vo.

JEFFERYS, T. A Description of the Maritime Parts of France, containing a particular account of all the fortified towns, forts, harbours, bays and rivers, etc. 2nd edition. 3 vols.
Lond. 1774. obl. 4to.

JEFFREYS, E. A confutative Biographical Notice of Julius Jeffreys. *Tract. 8vo. vol. 183. Lond. 1855. 8vo.*

JEFFRY, —. A Key to the Papers which have been presented to the House of Commons, upon the subject of the Charges preferred against the Earl of St. Vincent. *Lond. 1806. 8vo.*

WELLETT, J. H. A Treatise on the Theory of Friction. *Dublin and Lond. 1872. 8vo.*

JENISON, E. S., and Co. What is the Proper Housing for an Exposition in 1893? *Tract. 8vo. vol. 508. Chicago, 1890. 8vo.*

JENKIN, F. Address on Telferage. *Tract. 8vo. vol. 361. 1883. 8vo.*

— Bridges : an elementary treatise on their construction and history. *Edinburgh, 1876. 4to.*

— Electricity. *Lond. [1881.] 8vo.*

— Electricity and Magnetism. 4th edition. *Lond. 1878. 8vo.*

— Healthy Houses. *Edinburgh, 1878. 8vo.*

— A Lecture on the Education of Civil and Mechanical Engineers in Great Britain and abroad, etc. *Tract. 8vo. vol. 167. Edinburgh, 1868. 8vo.*

— Lectures on the Construction of Telegraphic Lines. *Tract. 8vo. vol. 243. Chatham, 1863. 8vo.*

— Lectures on the Maintenance and Efficiency of Telegraphic Lines. *Tract. 8vo. vol. 243. Chatham, 1863. 8vo.*

— On the Application of graphic Methods to the determination of Efficiency of Machinery. *Tract. 4to. vol. 96. [Edinburgh, 1877-78.] 4to.*

— Papers, Literary, Scientific, &c. Edited by S. Colvin and J. A. Ewing. With a memoir by R. L. Stevenson. 2 vols. *Lond. 1887. 8vo.*

— Reports of the Committee on Electrical Standards. Revised by Sir W. Thomson and others. *Lond. 1873. 8vo.*

— See STOTHERD, R. H. Lectures on Electrical Measurements, delivered by F. Jenkin, etc. 1867.

JENKINS, B. G. On Forecasting the Weather. *Tract. 8vo. vol. 446. Brussels, 1887. 8vo.*

JENKINS, E., and RAYMOND, J. The Architect's Legal Handbook. 4th edition. *Lond. 1889. 8vo.*

JENKINS, H. C. A Graphic Method for Calculating Blast Furnace Charges or "Burdens." *Tract. 8vo. vol. 530. Lond. 1891. 8vo.*

JENKINS, P. A letter to Isaac Tomkins, author of the "Thoughts upon the Aristocracy of England ;" with a postscript. 5th edition. *Tract. 8vo. vol. 63. Lond. 1835. 8vo.*

JENNINGS, G. Biography of G. Jennings. *Tract. 8vo. vol. 111. Lond. 1887. 4to.*

- JERNINGHAM, A. W.** Remarks on the means of directing the Fire of Ships' Broad-sides: with a proposed method of controlling and delivering a simultaneous converging fire. *Tract.* 8vo. vol. 387. Lond. 1861. 8vo.
- JERRARD, G. B.** Mathematical Researches. *Tract.* 8vo. vol. 187. Bristol, 1832–35. 8vo.
- Reflections on the Resolution of Algebraic Equations of the fifth degree. *Tract.* 8vo. vol. 189. [Lond.] 1845. 8vo.
- JERSEY.** Law on Pilotage, by the States of the Island of Jersey. *Tract.* 8vo. vol. 334. Jersey, 1846. 8vo.
- Regulations for the Boatmen, Porters and Carters approved by the States, 18 August, 1846. *Tract.* 8vo. vol. 334. Jersey, 1846. 8vo.
- JERSEY, H. DE, and OTHERS.** Report on Gas. Appendix. Lond. 1865. 8vo.
- JERVIS, T. B., Major.** Address descriptive of the state, progress, and prospects of the various Surveys and other scientific inquiries instituted by the Honourable East India Company throughout Asia, etc. *Tract.* 8vo. vol. 385. Torquay, 1838. 8vo.
- JERVIS, W. P.** Dei combustibili minerali d' Italia e della loro importanza economica, etc. *Tract.* 8vo. vol. 343. Torino, 1879. 8vo.
- I tesori sotterranei dell' Italia. 4 vols. Torino, 1873–89. 8vo.
- Indicateur perfectionné des chemins de fer. *Tract.* 4to. vol. 58. Turin, 1867. 4to.
- Progetto di massima di lavori idraulici nazionali nel Veneto: atti a scongiurare la frequente ricorrenza delle inondazioni disastrose del corso inferiore dell' Adige e del Po, etc. *Tract.* 8vo. vol. 357. Adria, 1884. 8vo.
- JERVOIS, W. F. D.** The Defence of New Zealand. *Tract.* folio. vol. 35. Wellington, 1884. folio.
- The Defensive Policy of Great Britain. *Tract.* 8vo. vol. 336. Lond. 1871. 8vo.
- JESSE, G. R.** Correspondence with Prof. Richard Owen on John Hunter and Aneurism. *Tract.* 8vo. vol. 338. Lond. 1882. 8vo.
- Correspondence with T. Spencer Wells on Ovariectomy. *Tract.* 8vo. vol. 338. Lond. 1882. 8vo.
- JESSOP, W.** Report . . . addressed to the Committee of Inquiry into the most desirable mode of improving the communication between Newcastle and Carlisle. *Tract.* 8vo. vol. 47. Newcastle, 1825. 8vo.
- Report on the Navigation of the Rivers Thames and Isis. *Tract.* 8vo. vol. 34. Lond. 1791. 8vo.
- Report on the Practicability of making an artificial Harbour, for large vessels, in the Bay of Dublin. *Tract.* 8vo. vol. 10. Dublin, 1800. 8vo.

- JESSOP, W.—*continued*. Report on the projected Railway from Pinxton to Leicester. *Tract. 8vo. vol. 2. Alfreton, 1833. 8vo.*
- Report respecting the Drainage of the low grounds lying on the Wolds, or west side of the river Hull, Frodingham, Carrs, Liffet, etc. *Tract. 8vo. vol. 46. Hull, 1796. 8vo.*
- Report to the Committee of Driffeld Navigation Commissioners, appointed for the purpose of taking into consideration the scheme of drainage of the low grounds on the east and west sides of the river Hull, so far as the same affects the Driffeld navigation. *Tract. 8vo. vol. 46. Driffeld, 1797. 8vo.*
- JESSOP, W., and CHAPMAN, W. Report on the proposed Line of Navigation between Newcastle and Maryport; with abstracts of the estimates of this line, and also of that from Stella to Hexham. *Tract. 8vo. vol. 6. Newcastle, 1795. 8vo.*
- JESSOP, W., and MYLNE, R. Reports by W. Jessop and R. Mylne, appointed by the Commissioners of the navigation of the Thames and Isis, to survey the state of the said navigation from Lechlade to Day's Lock; to which are added some orders of the Commissioners on the said reports, and an account of the tolls payable on the said navigation from Cricklade to Staines; also an estimate. *Tract. 8vo. vol. 34. [Lond.] 1791. 8vo.*
- JESSOP, W., RENNIE, J., and CHAPMAN, W. Report to the Commissioners for the Beverley and Barmston drainage. *Tract. 8vo. vol. 46. Hull, 1804. 8vo.*
- JESSOP, W. H. R. A complete Decimal System of Money and Measures. Part 2. *Tract. 8vo. vol. 119. Cambridge, 1856. 8vo.*
- JEVONS, T. An attempt to investigate the Cause of the late extraordinary Changes in the Bed of the river Mersey. *Tract. 8vo. vol. 71. Liverpool, 1828. 8vo.*
- The prosperity of Landholders not dependant on the Corn Laws. *Tract. 8vo. vol. 61. Liverpool, 1840. 8vo.*
- Remarks on Criminal Law; with a plan for an improved system, etc. *Liverpool, 1834. 8vo.*
- JEVONS, W. S. The Coal Question; an inquiry concerning the progress of the nation, and the probable exhaustion of our coal mines. 2nd edition. *Lond. 1866. 8vo.*
- The Principles of Science: a treatise on logic and scientific method. 2 vols. *Lond. 1874. 8vo.*
- JEWETT, C. C. On the construction of Catalogues of Libraries, and their publication by means of separate, stereotyped titles: with rules and examples. (*Smithsonian Report.*) 2nd edition. *Tract. 8vo. vol. 121. Washington, 1853. 8vo.*
- Notices of Public Libraries in the United States of America. (*Smithsonian reports.*) *Washington, 1851. 8vo.*
- JICINSKY, W. Monographie des Osfrau-Karwiner Steinkohlen Revieres. 2 vols. *Teschen, 1885. 4to.*

- J. M. WHITE, *Steamship*. U.S. mail steamer "J. M. White."
Tract. 8vo. vol. 334. Louisville, 1878. 8vo.
- JOBARD, J. B. A. M. Chemin de fer électro-pneumatique. *Tract. 8vo. vol. 77. [Paris, 1846 ?] 8vo.*
- Création de la propriété intellectuelle. De la nécessité et des moyens d'organiser l'industrie, de moraliser le commerce et de discipliner la concurrence. *Tract. 8vo. vol. 53. Bruxelles, 1843. 8vo.*
- Création d'une noblesse industrielle. Dialogue entre Messrs. Le Blanc et Le Noir. *Tract. 8vo. vol. 53. Bruxelles, [1850 ?] 8vo.*
- Gaz à l'eau : invention et fabrication. *Tract. 8vo. vol. 58. [1846.] 8vo.*
- Industrie française. Rapport sur l'exposition de 1839. 2 vols. *Bruxelles and Paris, 1841-42. 8vo.*
- Nouvelle économie sociale, ou monautopole industriel, artistique, commercial, et littéraire : fondé sur la pérennité des brevets d'invention, etc. *Paris, 1844. 8vo.*
- Plus de machines à vapeur horizontales. *Tract. 8vo. vol. 129. Bruxelles, 1857. 8vo.*
- JOBSON, D. J. Philosophical papers. No. 1. Hydraulics of the Motion and Equilibrium of Fluids. *Tract. 8vo. vol. 296. Lond. 1828. 8vo.*
- JOCELYN, J. R. J., *Capt.* The Equipment of Field Artillery. *Tract. 8vo. vol. 464. Woolwich, 1881. 8vo.*
- JOEL, L. A Consul's Manual and Shipowner's and Shipmaster's practical Guide in their transactions abroad. *Lond. 1879. 8vo.*
- JOHN, J. F. Ueber Kalk und Mörtel im Allgemeinen. *Tract. 8vo. vol. 292. Berlin, 1819. 8vo.*
- JOHNS, W. R. Petrolia : a brief history of the Pennsylvania petroleum region, 1870. *See CONE, A., and JOHNS, W. R.*
- JOHNSON, A. B. The Light-House Establishment. *Tract. 4to. vol. 87. (From "Hamersly's Naval Cyclopædia.") [1881 ?] 4to.*
- JOHNSON, C. W. The Advantages of Railways to Agriculture : [and] Observations on the general Importance of Railways, by George W. Johnson. *Tract. 8vo. vol. 256. Lond. [1840 ?] 8vo.*
- JOHNSON, C. W., and HARE, J. The annual Register of Agricultural Implements, with a catalogue of the chief of those exhibited at the Derby meeting, 1843 ; with a history of the Royal Agricultural Society of England. *Tract. 8vo. vol. 61. Lond. 1843. 8vo.*
- Guide to the Southampton meeting of the Royal Agricultural Society, 1844, etc. *Lond. 1844. 12mo.*
- JOHNSON, E. F. Letter from the Chief Engineer of the Northern Pacific Railroad to International Convention, Portland, Maine. *Tract. 8vo. vol. 186. Middletown, Conn., 1868. 8vo.*

- JOHNSON, E. F.—*continued*. The Navigation of the Lakes and navigable Communications therefrom to the seaboard, and to the Mississippi river, and the relation of the former to the lines of railway leading to the Pacific. *Tract*. 8vo. vol. 170.
Hartford, 1866. 8vo.
- Northern Pacific Railroad. Report to the board of directors, April 1869, and reports of surveys executed in 1867, *etc*. *Tract*. 8vo. vol. 186.
Hartford, 1869. 8vo.
- Railroad to the Pacific. The Northern Route: its general character relative merits, *etc*. *Tract*. 8vo. vol. 104.
New York, 1854. 8vo.
- JOHNSON, E. J., Captain, R.N. On the application of "Native Alloy" for the Pivots of Magnetic Compasses. With results of experiments, *etc*. *Tract*. 4to. vol. 64. Lond. 1840. 8vo.
- Practical Illustrations of the necessity for ascertaining the Deviations of the Compass; with explanatory diagrams . . . 2nd edition.
Lond. 1852. 8vo.
- JOHNSON, E. R. Inland Waterways: their relation to transportation. [*Annals of the American Academy of Political and Social Science*. Supplement.] Philadelphia, 1893. 8vo.
- JOHNSON, G. W. *See* JOHNSON, C. W. Advantages of Railways . . . and Observations on the importance of Railways. By G. W. Johnson. [1840?]]
- JOHNSON, H. M. W. P. Practical Navigation with reference to the increased Speed of Steamers. [*Papers of the Shipmasters' Soc*. No. 12.] Lond. 1891. 8vo.
- JOHNSON, J., and J. H. A concise View of the Law connected with Letters Patent for Inventions. Lond. 1871. 12mo.
- The New Patent Law, 1883. Lond. 1884. 8vo.
- The Patentee's Manual: being a treatise on the law and practice of Letters Patent. 4th edition. Lond. 1879. 8vo.
- — 6th edition. Lond. 1890. 8vo.
- JOHNSON, J. B. A manual of the Theory and Practice of Topographical Surveying, by means of the transit and stadia. New York, 1885. 8vo.
- The Theory and Practice of Surveying. New York, 1886. 8vo.
- Three Problems in River Physics. *Tract*. 8vo. vol. 406.
Salem, Mass., 1885. 8vo.
- JOHNSON, J. B., BRYAN, C. W., and TURNEAURE, F. E. The Theory and Practice of modern Framed Structures, *etc*.
New York, 1893. 4to.
- JOHNSON, J. H. Hints to inventors. 1850. *See* JOHNSON, W., and J. H.
- [For works by J. H. Johnson and J. Johnson on Patent Law:] *See* JOHNSON, J., and J. H.

- JOHNSON, J. H., and MALLET, R. The Practical Mechanics' Journal Scientific Record of the International Exhibition of 1862. *Lond.* [1862?] 4to.
- JOHNSON, L. C. Tertiary and Cretaceous Strata, etc. 1887. See SMITH, E. A., and JOHNSON, L. C.
- JOHNSON, R. On the relative powers of metals and alloys to conduct heat. 1858. See CRACE-CALVERT, F., and JOHNSON, R.
- On the specific gravities of alloys, [1859.] See CRACE-CALVERT, F., and JOHNSON, R.
- JOHNSON, S. A. The Bombay Docks. *Tract. folio. vol. 18.*
Bombay, 1874. folio.
- JOHNSON, SAMUEL, LL.D. A Dictionary of the English Language. . . With corrections. . . by the Rev. H. J. Todd. 2nd edition. 3 vols. *Lond.* 1827. 4to.
- Dictionary of the English language in miniature . . . 15th edition. *Montrose*, 1803. 12mo.
- JOHNSON, SAMUEL W. Peat and its uses as Fertilizer and Fuel. *New York*, 1866. 8vo.
- JOHNSON, W. The Imperial Cyclopædia of Machinery. *Lond.* [1852-56.] folio.
- See ARMENGAUD, J. E., and C., and AMOUROUX, —. The Practical Draughtsman's Book of Industrial Design. . . Rewritten . . . by W. Johnson. 1853.
- JOHNSON, W., and J. H. Hints to inventors intending to obtain Letters Patent for their inventions, etc. *Tract. 8vo. vol. 88.*
Lond. [1850?] 8vo.
- JOHNSON, W. R. Notes on the use of Anthracite in the manufacture of Iron, etc. *Boston*, 1841. 8vo.
- A Report to the Navy Department of the United States, on American Coals, applicable to steam navigation and to other purposes. *Washington*, 1844. 8vo.
- Reports to the Secretary of the Navy, in compliance with a resolution of the senate, in relation to the inventions of T. S. Easton, for preventing Explosions of Steam Boilers. *Tract. 8vo. vol. 55.*
New York, 1842. 8vo.
- JOHNSTON, A. K., the Elder. A general Dictionary of Geography . . . forming a complete Gazetteer of the World. New edition, revised. *Lond.* 1877. 8vo.
- Index Geographicus; being a list, alphabetically arranged, of the principal places on the globe, etc. *Edinburgh and Lond.* 1864. 8vo.
- The Physical Atlas of Natural Phenomena. *Edinburgh*, 1856. folio.
- The Royal Atlas of Modern Geography, etc. *Edinburgh and Lond.* 1869. folio.
- — A new edition. *Edinburgh and Lond.* 1883. folio.

- JOHNSTON, A. K., *the Elder*—continued. A new edition, with additions and corrections by T. B. Johnston.
Edinburgh and Lond. 1889. folio.
- Africa: revised . . . by E. G. Ravenstein, etc. 4th edition.
[Stanford's Compendium of Geography and Travel.]
Lond. 1884. 8vo.
- JOHNSTON, A. K., *the Younger*. The Library Cyclopædia of Geography. 1880. See BRYCE, J., and JOHNSTON, K.
- JOHNSTON, D. General, Medical, and Statistical History of the present condition of Public Charity in France. [A review.]
Tract. 8vo. vol. 452. (From the *Edinb. Rev.*) [*Lond.* 1829.] 8vo.
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Brighton, 1844. 8vo.
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Edinburgh, 1834. 8vo.
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Lond. 1831. 8vo.
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Edinburgh, 1872. 8vo.
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[Liverpool, 1893.] 8vo.
- JOHNSTON, T. M. H. Administration Report on the operations of the Public Works Department of Travancore, together with a special report on the works of the A. V. M. canal. *Tract.* 8vo. vol. 210.
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- Lakes Ellesmere and Forsyth Reclamation and Akaroa railway. *Tract.* folio. vol. 25.
Christchurch, 1878. folio.
- Little River and Akaroa Railway Report, October 1st, 1879. *Tract.* 8vo. vol. 302.
Christchurch, 1879. 8vo.
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- Report on the Harbour and Roadstead of St. Peter-port, in the island of Guernsey, accompanied by a design for a proposed new harbour, etc. *Tract. 8vo. vol. 173.*
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Canterbury, N.Z., 1877. 8vo.
- Travancore Public Works Department. Report on some of the Works in the Southern Division. *Tract. 8vo. vol. 210.*
Trevandrum, 1867. 8vo.
- JOHNSTONE, JAMES. The Cause of the Explosion of a Boiler of H.M. Ship "Thunderer." *Tract. 8vo. vol. 281.*
Edinburgh, 1877. 8vo.
- JOHNSTONE, JOHN. An Account of the most approved mode of Draining Land; according to the system practised by Mr. J. Elkington, with an appendix, etc. *Edinburgh, [1797.] 4to.*
- — New edition. *Lond. 1841. 8vo.*
- JOHNSTON-LAVIS, H. J. Monograph of the Earthquakes of Ischia, and some calculations by Rev. Prof. S. Haughton.
Lond. 1885. 4to.
- JOLLY, Dr. Ueber die Physik der Molecularkräfte. Rede, etc. *Tract. 4to. vol. 42.*
München, 1857. 4to.
- JOLY, C. De la ventilation des théâtres. *Tract. 4to. vol. 80.*
Paris, 1876. 4to.
- De l'épuration des eaux d'égouts. *Tract. 8vo. vol. 275.*
Paris, 1877. 8vo.
- La question des eaux d'égouts en France et en Angleterre. *Tract. 8vo. vol. 275.*
Paris, 1877. 8vo.
- Les eaux d'égout à Paris. *Tract. 8vo. vol. 406.*
Paris, 1885. 8vo.
- JOLY, J. On an apparatus for obtaining telegraphically the readings of Meteorological Instruments placed at a distance from the observer. *Tract. 8vo. vol. 474.*
[Dublin,] 1883. 8vo.
- JOLY, P. The Extension of the Port of Dunkirk. [2nd Int. Mar. Congr.]
[Lond. 1893.] 8vo.

- JOLY, V. C. *Traité pratique du chauffage, de la ventilation et de la distribution des eaux dans les habitations particulières, etc.*
Paris, 1869. 8vo.
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Paris, 1817. folio.
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- JONES, A. S. *Lieut.-Col. Will a Sewage Farm Pay, etc. Tract.* 8vo.
vol. 297. Lond. 1874. 8vo
- JONES, A. W. *A Paper on Modern Tramway Construction, etc. Tract.* 8vo. vol. 319. [Lond.] 1879. 8vo.
- JONES, CHARLES, *Lieut., R.A.* *A text-book . . . of the Rifled Ordnance in the British service, 1872. See STONEY, F. S., and JONES, C.*
- JONES, CHARLES, *M. Inst. C.E.* *Refuse Destructors, and their results up to the present time.*
Lond. 1887. 8vo.
- 2nd edition. Lond. 1894. 8vo.
- JONES, E. T. *English System of Book-keeping, by single or double entry, etc. Tract.* 4to. vol. 5. Bristol, 1796. 4to.
- JONES, F., *Capt.* *The Direct Highway to the East. Tract.* 8vo. vol. 442. Lond. 1872. 8vo.
- JONES, *Rev. H. L.* *Report on general Education in France. Tract.* 8vo. vol. 69. [1842?] 8vo.
- *See LE KEUX, J.* *Memorials of Cambridge . . . With historical accounts by T. Wright and the Rev. H. Longueville Jones. 1847.*
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- JONES, HENRY B., *Dr.* *The Life and Letters of Faraday.* 2 vols. Lond. 1870. 8vo.
- *The Royal Institution : its founder and its first professors.*
Lond. 1874. 8vo.
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Lond. 1878. 4to.
- JONES, *Sir HORACE*, and *GREGORY, Sir C. H.* *Report on the Widening of London Bridge. Tract.* folio. vol. 18. Lond. 1875. folio.
- JONES, INIGO. *The most notable antiquity of Great Britain, vulgarly called Stone Heng, restored. [Completed and published by John Webb.]*
Lond. 1655. folio.
- JONES, J. A. *Treatise on Switches and Crossings.*
Madras, 1881. 8vo.
- JONES, J. E. *Report on the means of supplying the Metropolis with Pure Water. Tract.* 8vo. vol. 78. Lond. 1841. 8vo.
- *The Sewage of the City of Westminster, described and delineated.*
Lond. 1836. folio.

- JONES, J. F. Memoirs [connected with] Baghdad . . . Nahrwan Canal . . . Frontier of Turkey and Persia . . . Median Wall of Xenophon and discovery of the Ancient Opis . . . Topography of Nineveh, *etc.* [*Selections from Records of the Govt. of Bombay*, No. 43, n.s.] *Bombay*, 1857. 8vo.
- JONES, J. T., and WILD, J. H. Specification of Apparatus for Boring Rocks. *Tract.* 8vo. vol. 466. *Lond.* 1882. 8vo.
- JONES, R. H. Asbestos; its production and use. With some account of the asbestos mines of Canada. *Lond.* 1888. 8vo.
- Asbestos: its properties, occurrence, and uses, *etc.* *Lond.* 1890. 8vo.
- JONES, S. T. Specification of the Patent for Improvements in Steam-engines and in Machinery for propelling Vessels. *Tract.* 8vo. vol. 183. *Lond.* 1848. 8vo.
- JONES, T. A companion to the Mountain Barometer: consisting of Tables . . . [for] computing Heights with that instrument: together with a description and use of the most improved Mountain Barometers. 2nd edition. *Tract.* 8vo. vol. 335. *Lond.* [1820?] 8vo.
- JONES, T. E. The Britton Testimonial. An account of a public dinner given to John Britton, F.S.A. *Tract.* 8vo. vol. 115. *Lond.* 1846. 8vo.
- JONES, W., M.D., *etc.* Gas and Gas Meters: an address . . . demonstrating the cost of Coal Gas, exposing the fallacies and frauds of gas meters, giving plain rules for the management of meters, *etc.* *Tract.* 8vo. vol. 519. *Lond.* 1843. 8vo.
- JONES, WALTER. Heating by Hot Water: with information and suggestions on the best methods of heating public, private, and horticultural buildings. *Lond.* 1890. 8vo.
- JONES, WILLIAM, *Instrument Maker*. The description and use of the Sea Octant, commonly called Hadley's Quadrant, *etc.* 3rd edition. *Tract.* 8vo. vol. 504. *Lond.* 1808. 8vo.
- Illustration and mensuration of Solid Geometry. 1787. *See* COWLEY, J. L., and JONES, W.
- JONES, WILLIAM, *Instrument Maker*, and S. A Catalogue of Optical, Mathematical and Philosophical Instruments, *etc.* *Tract.* 8vo. vol. 504. *Lond.* 1817. 8vo.
- JONES, WILLIAM, *Capt., R.E.* Report on Canal Irrigation of Rohilkund. 1855. *See* INDIA.—ROHILKUND.
- JONES, WILLIAM A., *Capt., U.S.A.* Report upon the Reconnaissance of North Western Wyoming, including Yellowstone National Park, made in 1873. *Washington*, 1875. 8vo.
- JONES, WILLIAM ARTHUR, M.A. The Decimal System of Measures, Weights, and Money. 2nd edition. *Tract.* 8vo. vol. 207. *Lond.* 1852. 8vo.

- JONES, WILLIAM R. Standard Rail Sections and Fish Bar Joints. *Tract.* 8vo. vol. 413. [Pittsburg,] 1883. 8vo.
- JONGH, G. J. DE. Le port de Rotterdam, etc. *Tract.* 4to. vol. 116. Rotterdam, 1892. 4to.
- JONSTORFF, J. VON. Die Heizstoffe und das Wichtigste aus der Wärmelehre. Wien, 1890. 8vo.
- Practisches Handbuch für Eisenhütten-Chemiker. Wien, 1885. 8vo.
- JOPLING, J. An Impulse to Art; or, ancient Greek practical principles for volutes and lines of beauty innumerable. *Tract.* 8vo. vol. 155. Lond. 1849. 8vo.
- A Key to Proportions of the Parthenon. Nos. I. and II. *Tract.* 8vo. vol. 155. Lond. 1855-56. 8vo.
- The Practice of Isometrical Perspective. *Tract.* 8vo. vol. 76. Lond. 1833. 8vo.
- The Septenary System of generating Curves by continued motion; including sundry observations on the system, etc. *Tract.* 8vo. vol. 73. Lond. 1823. 8vo.
- JOPLING, T. T. Letters Patent for invention of an improved Construction of Water Meter. *Tract.* 4to. vol. 50. Lond. 1856. 4to.
- JÖRANSON, C. L. Tabeller, ä som föreställa förhållandet emellan Sveriges och andra länders mynt, vigt och mätt. *Tract.* 8vo. vol. 38. Stockholm, 1777. 4to.
- JORDAN, C. H. Particulars of Dry Docks on the Thames. Lond. 1882. 8vo.
- Tabulated Weights of angle, tee, bulb, beam, round, square, and flat Iron, etc. Lond. 1870. 8vo.
- — 4th edition. Lond. 1885. 8vo.
- JORDAN, D. S. Report on the collection of Fishes made by Dr. Coues in Dakota and Montana during . . . 1873 and 1874. *Tract.* 8vo. vol. 481. Washington, 1878. 8vo.
- JORDAN, G. W. An Account of the Irides or Coronæ which appear around, and contiguous to, the bodies of the sun, moon, and other luminous objects. *Tract.* 8vo. vol. 43. Lond. 1799. 8vo.
- New Observations concerning the Colours of thin transparent Bodies, showing those phenomena to be inflections of light, and that the Newtonian fits of easy transmission and reflection derived from them have no existence, etc. Lond. 1800. 8vo.
- The Observations of Newton concerning the inflections of light; accompanied by other observations differing from his, etc. *Tract.* 8vo. vol. 43. Lond. 1799. 8vo.
- JORDAN, JAMES. Specification of the Patent for Invention in the art of constructing Bridges, aqueducts, etc. *Tract.* 8vo. vol. 14. Bristol, 1797. 8vo.

- JORDAN, *Rev. JOHN*. A Parochial History of Enstone, in the county of Oxford. *Lond.* 1857. 8vo.
- JORDAN, S. Album du cours de métallurgie, professé à l'École centrale des Arts et Manufactures. (Atlas of Plates.) *Paris*, 1875. 8vo. and 4to.
- Les progrès recents de la métallurgie du fer. *Tract.* 8vo. vol. 343. *Paris*, 1881. 8vo.
- Souvenirs du Siège de Paris. Notes sommaires pour servir à l'étude de la fabrication des canons. *Tract.* 8vo. vol. 206. *Paris*, 1871. 8vo.
- JORDAN, W. L. The "Challenger" explorations. *Tract.* 8vo. vol. 454. *Lond.* 1888. 8vo.
- The New Principles of Natural Philosophy. *Lond.* 1883. 8vo.
- The Ocean ; its Tides and Currents and their causes. *Lond.* 1873. 8vo.
- — [Another edition.] *Lond.* 1885. 8vo.
- JORDISON, J. The Tees Tide Tables, 1843, etc. See TURNBULL, G., and JORDISON, J.
- JOSEPHSON, J. P. Condensed History of Floods in the Hawkesbury River. *Tract.* 8vo. vol. 418. *Sydney*, 1885. 8vo.
- Some Facts about the great Tidal Wave, May, 1877. *Tract.* 8vo. vol. 314. *Sydney*, 1879. 8vo.
- JOUBERT, J. Leçons sur l'électricité et le magnétisme, 1882, etc. See MASCART, E., and JOUBERT, J.
- A Treatise on Electricity and Magnetism, 1883, etc. See MASCART, E., and Joubert, J.
- JOULE, J. P. On the Air-Engine. *Tract.* 4to. vol. 52. *Lond.* 1852. 4to.
- (From the Phil. Trans.)
- Scientific Papers. 2 vols. *Lond.* 1884-87. 8vo.
- JOURDIER, A. Le matériel agricole, ou description et examen des instruments des machines, des appareils et des outils au moyen desquels on peut ; 1°. Sonder, defricher . . . 2°. Labourer, fouiller, etc. 2° édition. *Paris*, 1856. 12mo.
- JOURNET, F. L'Australie. *Paris*, 1885. 8vo.
- JOYNER, H. B. The Progress and ultimate Results of Meteorology especially considered in reference to Japan. *Tract.* 8vo. vol. 405. *Yokohama*, [1875 ?] 8vo.
- JUDA, A. Der Bau der Eisenbahn-Brücke über die Save bei Brood. 1880. See BECK VON NORDENAU, O., and JUDA, A.
- JUDAH, T. D. Report upon recent Survey, Progress of Construction, and an approximate Estimate of Cost of first division of fifty miles of the Central Pacific Railroad of California. *Tract.* 8vo. vol. 170. *Sacramento*, 1863. 8vo.

- JUDD, J. W. On the Jurassic Deposits which underlie London, with appendices by T. R. Jones, G. J. Hinde, and G. R. Vine. (Supplement.) *Tract. 8vo. vols. 379 and 414. Lond. 1884. 8vo.*
- Volcanoes: what they are and what they teach. 4th edition. *Lond. 1888. 8vo.*
- JUDD, N. B., and CAMPBELL, G. C. Ward v. Mississippi and Missouri Railroad Company. Abstract pleadings and proof, and argument, on final hearing, etc. *Tract. 8vo. vol. 197. Chicago, 1850. 8vo.*
- JUDGE, M. H. Sanitary Arrangements of Dwelling-Houses. *Lond. 1884. 8vo.*
- JUDSON, W. P. From the West and North-west to the Sea by way of the Niagara Ship Canal. 1890. 8vo.
- Spur Crib placed off Oswego outer Harbor, Lake Ontario, New York. *Tract. 8vo. vol. . 1889. 8vo.*
- The Water Supply of Burlington, Vermont. Report, etc. *Tract. 8vo. vol. . Oswego, 1884. 8vo.*
- JUKES, J. B. Additional Notes on the Grouping of the Rocks of North Devon and West Somerset; with a map and section, etc. *Tract. 8vo. vol. 175. Dublin, 1867. 8vo.*
- A Sketch of the Physical Structure of Australia, so far as it is at present known. *Lond. 1850. 8vo.*
- The South Staffordshire Coal-field. 2nd edition. [*Memoirs of the Geological Survey.*] *Lond. 1859. 8vo.*
- The Student's Manual of Geology. 3rd edition. Edited by A. Geikie. *Edinburgh, 1872. 8vo.*
- JUKES, J. B., and OTHERS. Lectures on Gold for the instruction of Emigrants about to proceed to Australia. *Lond. 1852. 8vo.*
- JUKES-BROWNE, A. J. The Building of the British Isles: a study in geographical evolution. *Lond. 1888. 8vo.*
- The Occurrence of Granite in a Boring at Bletchley. *Tract. 8vo. vol. 493. Hertford, 1889. 8vo.*
- See PENNING, W. H. Text book of Field Geology. With a chapter on Palæontology, by A. J. Jukes-Browne. 1879.
- JULIAN, H. Art applied to Coachbuilding. *Tract. 8vo. vol. 475. Bolton, 1884. 8vo.*
- JULLIEN, B. De quelques points des sciences dans l'antiquité. *Paris, 1854. 8vo.*
- JULLIEN, C. E. Les affinités capillaires et les phénomènes de la trempe mis en présence. *Paris, 1866. 12mo.*
- À-propos de verres, ou les trois solutions du problème de chimie $MO < MO^1 < MO^2$ mises en présence. *Paris, 1867. 8vo.*
- Introduction à l'étude de la chimie industrielle. *Paris et Liège, 1866. 12mo.*

- JULLIEN, C. E.—*continued*. Traité théorique et pratique de la construction des machines à vapeur fixes, locomotives, et marines. 2^{me} édition. (Atlas of plates.) Paris, 1862. 4to.
- Traité théorique et pratique de la métallurgie du fer. (Atlas of plates.) Paris et Liège, 1861. 4to.
- JULLIEN, Marc A. Petit code philosophique et moral. Exposé sommaire de douze lois générales qui se reproduisent dans toutes les œuvres de la nature. Tract. 8vo. vol. 193. Paris, 1844. 8vo.
- JULLIEN, P. A. A. Du prix des transports sur les chemins de fer de la Belgique, en 1842 et en 1843. Tract. 8vo. vol. 77. Paris, 1844. 8vo.
- JUNIOR ENGINEERING SOCIETY, London. Papers, transactions, etc. Lond. 1886. 8vo.
- JUNNER, R. G. The Practice before Railway Commissioners under the Regulation of Railways Act, 1873. Lond. 1874. 8vo.
- JUPP, E. B. An historical Account of the worshipful Company of Carpenters of the City of London, etc. Lond. 1848. 8vo.
- JUPPONT, P. L'éclairage électrique à la guerre. See NANSOUTY, M. DE. Science et guerre, etc. 1888. 8vo.
- JUPPONT, P., and FOURNIER, G. L'éclairage électrique dans les appartements. 3^e édition. Paris, 1889. 8vo.

K.

- KAAN**, —. Bericht . . . über die im Auftrage des Ackerbauministers vorgenommenen Berechnungen, betreffend die österreichischen Bruderladen. *Tract. 4to. vol. 108.* *Wien*, 1885. 4to.
- KAEMTZ**, L. F. Cours complet de météorologie. Traduit et annoté par C. Martins, etc. *Paris*, 1858. 12mo.
- KAFFRARIA**. Plan of territories, formerly known as Kaffraria Proper, lying between the following boundaries: the Quathlamba Range on the north, the sea coast on the east, Natal on the north-east, and the Kei and Indwe on the south-west. *Cape Town*, 1884. 8vo.
- KAISER**, O. Beiträge zur Pflege der Bodenwirthschaft mit besonderer Rücksicht auf die Wasserstandsfrage. *Tract. 8vo. vol. 350.* *Berlin*, 1883. 8vo.
- KAISERLICHE AKADEMIE DER WISSENSCHAFTEN**. See AKADEMIE DER WISSENSCHAFTEN.
- KALAKOUTZKY**, N. W., Col. [Experiments on Powder Gases. In Russian.] *St. Petersburg*, 1879. 8vo.
- Investigations into the Internal Stresses in Cast Iron and Steel. *Lond.* 1888. 4to.
- KALLSTENIUS**, G. S. Hydrauliska försök, anställda vid Fahlugruftva, etc., 1818–22. See LAGERHJELM, P., FORSELLES, J. H. AF, and KALLSTENIUS, G. S.
- KALM**, P. Kalm's Account of his Visit to England on his way to America in 1748. Translated by Joseph Lucas. *Lond.* 1892. 8vo.
- KANE**, E. K. Reports of foreign societies on awarding medals to the American Arctic Explorers, Kane, Hayes, Hall. *Tract. 8vo. vol. 267.* *Washington*, 1876. 8vo.
- KANE**, Sir R. The Industrial Resources of Ireland. 2nd edition. *Dublin*, 1845. 8vo.
- KANSAS**. Quarterly Report of the Kansas State Board of Agriculture. *Topeka*, 1881. 8vo.
- KANSAS STATE HISTORICAL SOCIETY**. Biennial Report of the Board of Directors, 1887–88. *Topeka*, 1889. 8vo.
- KAPP**, G. Dynamos, Alternators, and Transformers. *Lond.* [1893.] 8vo.
- Electromotors and their Application to Electric Traction. *Tract. 8vo. vol. 515.* *Chatham*, 1891. 8vo.

- KAPP, G.—*continued*. Electric Transmission of Energy, and its transformation, subdivision and distribution. *Lond.* 1886. 8vo.
 ——— 3rd edition, revised. *Lond.* 1891. 8vo.
 ——— Ueber Kreiselpumpen. *Tract.* 4to. vol. 109. [Leipzig, 1882.] 4to.
- KAPTEYN, A. The Train-pipe Indicator for the Westinghouse Automatic Brake. *Tract.* 4to. vol. 97. *Lond.* 1885. 4to.
 ——— Versnelde Werking van Lucht-Remmen. 's Gravenhage, 1889. 8vo.
- KARACHI. See INDIA :—KARACHI.
- KARLSRUHE. See CARLSRUHE.
- KARMARSCH, K. Katalog der Werkzeug-Sammlung an der Königlichen polytechnischen Schule zu Hannover. *Hannover*, 1870. 8vo.
 ——— See RÖHRIG, E. Technologisches Wörterbuch . . . Mit einem Vorwort von K. Karmarsch. 1887–91.
- KARMARSCH, K., and HEEBEN, F. Technisches Wörterbuch oder Handbuch der Gewerbkunde in alphabetischer Ordnung. 3 Bde. *Prag*, 1854–57. 8vo.
 ——— Dritte Auflage, ergänzt und bearbeitet von F. Kick und W. Gintl. 11 Bde. *Prag*, 1874–92. 8vo.
 ——— Technologische Encyclopädie, etc. 1830–65. See PRECHTL, J. J., and KARMARSCH, K.
- KARPENSKIE, L. A. [On the production of Russian mines in 1882. In Russian.] *St. Petersburg*, 1884. 8vo.
- KARRER, F. Geologie der Kaiser Franz Josefs Hochquellen-Wasserleitung. Eine Studie in den Tertiär-Bildungen am Westrande des Alpenen Theiles der Niederung von Wien. *Wien*, 1877. 4to.
- KARSTEN, C. J. B. Lehrbuch der Salinenkunde. 2 vols. *Berlin*, 1846, 47. 8vo.
 ——— Manuel de la métallurgie du fer. Traduit de l'allemand par F. J. Culmann. 2^e édition. 3 vols. *Metz*, 1830. 8vo.
 ——— System der Metallurgie, geschichtlich, statistisch, theoretisch und technisch. 5 vols. (Atlas of plates.) *Berlin*, 1831–32. 8vo. and folio.
- KARSTEN, Dr. G. Elektrizität des Gewitters und die Wirkung der Blitzableiter. *Tract.* 8vo. vol. 337. *Kiel*, 1880. 8vo.
- KARSTEN, W. J. G. Anfangsgründe der mathematischen Wissenschaften. 2 vols. *Greifswald*, 1780. 8vo.
- KARWIN. Report on the influence of fluctuations of Atmospheric Pressure on the evolution of Fire-Damp. Report of experiments . . . carried on in the Archduke Albert's Coal Mines near Karwin in Austrian Silesia. Translated, etc. *Tract.* 4to. vol. 99. *Vienna*, 1886. 4to.

- KATER, H., *Capt.* An Account of Experiments for determining the Variation in the length of the pendulum vibrating seconds, at the principal stations of the trigonometrical survey of Great Britain. *Tract.* 4to. vol. 9. *Lond.* 1819. 4to.
- An Account of the comparison of various British Standards of Linear Measure. *Tract.* 4to. vol. 9. *Lond.* 1821. 4to.
- An Account of the Construction and Adjustment of the New Standards of weights and measures of the United Kingdom, *etc.* *Tract.* 4to. vol. 9. *Lond.* 1826. 4to.
- The Description of a floating Collimator. *Tract.* 4to. vol. 9. *Lond.* 1825. 4to.
- KATER, H., *Capt.*, and LARDNER, D. A Treatise on Mechanics. [*Lardner's Cabinet Cyclopædia.*] *Lond.* 1830. 8vo.
- KAUFFER, P. Steam in the Engine; its heat, *etc.* *Lond.* 1873. 8vo.
- KAUFFMANN, J. Der Bau des Hauensteintunnels auf der schweizerischen Centralbahn. 1860. See PRESSEL, W., and KAUFFMANN, J.
- KAVEN, A. von. Anwendungen der Theorie der Böschungen. 2 vols. (Atlas of plates.) *Leipzig*, 1885. 8vo. and 4to.
- Die Baracken-Lazarethe des Vereins für den Regierungs-Bezirk Aachen im Kriege, 1870-71. See ADENAU, A., and KAVEN, A. von.
- Die Rutschungen und Beschädigungen der Böschungen der Erdlauten bei Eisenbahnen und Strassen. *Wiesbaden*, 1883. 4to.
- KEANE, A. H. Asia: edited by Sir R. Temple. 2nd edition. [*Stanford's Compendium of Geography and Travel.*] *Lond.* 1886. 8vo.
- KEATES, T. W. Hertford Sewage Works. Effluent Water. Report. *Tract.* folio. vol. 24. [1875.] folio.
- Metropolitan Board of Works. Report on an Examination of the Works of the Native Guano Company, at Leamington. *Tract.* 8vo. vol. 478. *Lond.* 1870. 8vo.
- Official Report of the results of a 3-months' trial of the A. B. C. process of utilising Sewage at Crossness. *Tract.* folio. vol. 35. *Lond.* 1873. folio.
- Reports [made in conjunction with Sir J. W. Bazalgette] relative to the . . . Operations of the Native Guano Company at Crossness. *Tract.* 8vo. vol. 435. *Lond.* 1873. 8vo.
- KEATING, E. H. On the Short Line Railway connecting the Canadian Pacific Railway at Montreal with the principal Atlantic ports of the Dominion of Canada. *Tract.* 8vo. vol. 404. *Halifax, N.S.*, 1885. 8vo.
- Report of the City Engineer of Halifax, Nova Scotia, for . . . 1872-73. *Tract.* 8vo. vol. 239. *Halifax*, 1873. 8vo.

- KEATING, E. H.—*continued*. Reports on proposed Dry Dock for the Port of Halifax, N.S., etc. *Tract. 8vo. vol. 348.*
Halifax, 1883. 8vo.
- Report on proposed Enlargement and Improvement in the Toronto Waterworks. *Tract. 8vo. vol. 506. Toronto, 1893. 8vo.*
- A Report on the means of preventing the Loss of life and property by Fire. *Tract. 8vo. vol. 346.*
Halifax, N.S., 1883. 8vo.
- Report on the wooden Graving Dock, at St. John's, Newfoundland. *Tract. 8vo. vol. 414.*
Halifax, 1884. 8vo.
- A scheme of Sewerage for the City of Halifax, Nova Scotia. *Tract. 8vo. vol. 259.*
Halifax, 1876. 8vo.
- KEAY, P. Examples of Estimating, etc. *Roorkee, 1866. folio.*
- KEEFER, S. Baie Verte Canal. Comparative profiles of the several Lines surveyed for a canal to connect . . . the Bay of Fundy with the Northumberland Straits. *Ottawa, 1873. 8vo.*
- Our Canals: Baie Verte and Welland. *Tract. 8vo. vol. 261.*
Lond. 1875. 8vo.
- Report to the President and Directors of the Niagara Falls Suspension Bridge Company, and to the President and Directors of the Clifton Suspension Bridge Company. *Tract. 8vo. vol. 224.*
Brockville, 1869. 8vo.
- KEEFER, T. C. The Canadian Pacific Railway. Address at the Annual Convention of the American Society of Civil Engineers at Milwaukee, Wisconsin, June 28, 1888. *Tract. 8vo. vol. 470.*
[New York,] 1888. 8vo.
- The Canals of Canada. *Montreal, 1894. 4to.*
- KEELER, J. E. Earthquakes in California. [*U.S. Geol. Survey. Bulletin No. 68.*]
Washington, 1890. 8vo.
- KEELHOFF, J. *Traité pratique de l'irrigation des prairies.*
Bruzelles, 1856. 8vo.
- — 2nd edition. 2 vols. *Paris, 1888. 8vo.*
- KEELING, G. W. Album of Photographs of the Severn Bridge at Lydney. *Lydney, 1876-79. 4to.*
- KEENE, W. New South Wales Coal Fields. Palaeozoic Fossils. *Tract. 8vo. vol. 295.*
Newcastle, N.S.W., 1867. 8vo.
- KEERAYEF, P. G. On the new Boiler House at the Abouchoff Cast-Steel Works. (In Russian.) *Tract. 8vo. vol. 250.*
St. Petersburg, 1870. 8vo.
- KEILY, J. Expansion of Structures by Heat. *Lond. 1887. 8vo.*
- KEITH, J. Our Patent Laws. *Tract. 8vo. vol. 509.*
Lond. 1891. 8vo.
- Report on the Heating and Ventilation of the Houses of Parliament. *Tract. 4to. vol. 121.*
Lond. 1894. 8vo.
- KELLAND, P. Theory of Heat. *Lond. 1837. 8vo.*

- KELLER, F. The Amazon and Madeira Rivers. *Lond.* 1874. folio.
- KELLER, H. Die Anlage der Fischwege. *Tract. 8vo. vol. 430.*
Berlin, 1885. 8vo.
- KELLER, K. Berechnung und Construction der Triebwerke, *etc.*
Heidelberg, 1874. 8vo.
- — — Zweite . . . Auflage. *München*, 1881. 8vo.
- Bericht über die Prüfung einer mechanischen Leiter auf ihre Stabilität und Tragkraft. *Tract. 8vo. vol. 449.* [1887.] 8vo.
- Der Charakter der technischen Umwälzungen des 19. Jahrhunderts, *etc.* *Tract. 8vo. vol. 119.* *Karlsruhe*, 1892. 8vo.
- Das Durchstossen von Metallen. Versuche und Berechnungen über den Arbeitsaufwand und Beobachtungen über das Verhalten der Materialien bei diesem Vorgange. *Tract. 4to. vol. 109.*
Berlin, 1888. 4to.
- Ferdinand Redtenbacher als Begründer der Maschinenwissenschaft. *Tract. 4to. vol. 115.* *Karlsruhe*, 1892. 4to.
- Der Marne-Saône Canal. *Tract. folio. vol. 42.*
Berlin, 1882. folio.
- Neueste Bestimmung der Wassermenge bei Ueberfällen durch M. H. Bazin. *Tract. 4to. vol.* *Berlin*, [1889, 90.] 4to.
- Ueber ausweichende Lagerung langer Wellen. *Tract. folio. vol. 44.* [1884.] folio.
- Ueber Prüfung mechanischer Leitern spez. Prüfung einer solchen von Magirus in Ulm, nach dessen patentirtem Systeme Konstruktion "G" erbauten. *Tract. 4to. vol. 106.* *Leipzig*, 1887. 4to.
- Ueber Seetiefenmessungen, speziell die Tiefenmessungen an den Schweizer-Seen. *Tract. 8vo. vol. 401.* *Karlsruhe*, 1885. 8vo.
- Verzeichnung und Herstellung der Zähne von Schraubenrädern. *Tract. 4to. vol. 115.* *Berlin*, 1889. 4to.
- KELLER, G. Essai d'une machine compound demi-fixe . . . Rapport, *etc.* 1880. See WALTER-MEUNIER, H., and KELLER, G.
- KELLEY, F. M. On the Junction of the Atlantic and Pacific Oceans, and the practicability of a Ship Canal without Locks by the valley of the Atrato. *Tract. 8vo. vol. 441.* *Lond.* 1856. 8vo.
(From Min. Proc. Inst. C.E.)
- Projet d'un canal maritime sans écluses entre l'océan Atlantique et l'océan Pacifique à l'aide des rivières Atrato et Truando. *Tract. 8vo. vol. 309.* *Paris*, 1857. 8vo.
- KELLEY, J. D. J. See REED, Sir E. J., and SIMPSON, E. Modern Ship of War . . . With supplementary chapters and notes by J. D. J. Kelley. 1888.
- KELLEY, W. D. Letters from Europe . . . to the Philadelphia Times. [On the question of Bimetallism.] *Tract. 8vo. vol. 310.*
Philadelphia, [1879.] 8vo.

- KELLOGG, M. Educational progress in California. [*Riverside dresses*, 1891.] *Berkeley*, 1892. 8
- KELLOW, J. The Slate Trade in North Wales, etc. *Tract.* 8
vol. 164. *Lond.* 1868. 8
- KELLY, Dr. J. The Life of J. Dollond, inventor of the Achromatic Telescope. 3rd edition. *Lond.* 1808. 4
- KELLY, J. W. [Eighteen Reports on the drainage of various districts in Ireland.] *Dublin*, 1843-51. 8
- KELLY, Dr. P. Metrology; or, an exposition of weights and measures, chiefly those of Great Britain and France, etc. *Tr*
8vo. vol. 40. *Lond.* 1816. 8
- A practical Introduction to Spherics and Nautical Astronomy
5th edition. *Lond.* 1822. 8
- KELSEY, R. Remarks on the Sewage of . . . London. *Tract.* 8
vol. 247. *Lond.* 1848. 8
- KELTIE, J. S. The Statesman's Year Book. See PERIODICAL PUBLICATIONS.
- KELVIN, Lord, [Sir William THOMSON.] See THOMSON, Sir W.
- KEMMA, A. Les *jeaux alimentaires*. *Tract.* 8vo. vol. 482.
Bruxelles, 1888. 8
- KEMMANN, G. Die argentinischen Eisenbahnen. *Tract.* 8
vol. 531. [*Berlin*, 1892.] 8
- Bemerkungen zur Entwicklung der Londoner Eisenbahn
Tract. 8vo. vol. 531. *Berlin*, 1890. 8
- Die berliner Schnellverkehrsfrage. *Tract.* 8vo. vol. 534.
Berlin, 1894. 8
- Der Verkehr Londons, mit besonderer Berücksichtigung
Eisenbahnen, etc. *Berlin*, 1892. fo
- KEMP, D. Yacht Designing: a treatise on the practical application
of the scientific principles upon which is based the art of Yacht
Designing. *Lond.* 1876. fo
- KEMPE, H. R. The Electrical Engineer's Pocket-Book of Modern
Rules, Formulæ, Tables, and Data. *Lond.* 1890. obl. 32
- The Engineer's Year-Book of formulæ, rules, tables, data, and
memoranda, etc. *Lond.* 1894. 8
- A Handbook of Electrical Testing, etc. *Lond.* 1876. 8
- — 4th edition. *Lond.* 1887. 8
- — 5th edition. *Lond.* 1892. 8
- KENDAL. Kendal Gas and Water Supply Act. *Lond.* 1846. fo
- KENDALL, A. Morse's Patent. Full Exposure of Dr. C. Jackson's pretensions to the invention of the American Electro-magnetic Telegraph. *Tract.* 8vo. vol. 119.
Washington, 1852. 8

KENNALL VALE. Report by Major J. P. Cundill on the circumstances attending an Explosion of Gunpowder in a Press-house of the Kennall Vale Gunpowder Factory, on the 7th Nov., 1887.

Lond. 1888. folio.

KENNEDY, A. B. W. A Description and Comparison of the methods of Electric Lighting . . . in use in London. *Tract.* 8vo. vol. 515.

Lond. 1891. 8vo.

(From the "Trans. of the Roy. Scottish Soc. of Arts.")

— Frequent Repetitions of Load. *Tract.* 8vo. vol. 422.

Chatham, 1885. 8vo.

— The Kinematics of Machinery. [*Science Lectures at South Kensington.* Vol. 1.] *Lond.* 1878. 8vo.

— The Mechanics of Machinery. *Lond.* 1886. 8vo.

— Possible and impossible Economies in the Utilisation of Energy : a lecture, etc. *Tract.* 8vo. vol. 517. *Lond.* 1893. 8vo.

— Summary of Reports on the working of the Sennett System of Smoke Prevention. *Tract.* 4to. vol. 121. *Lond.* 1891. 4to.

KENNEDY, H. F. Report of a Commission of Engineers appointed . . . to inquire into the causes of the Floods at Montreal, etc. 1890. See KEEFER, T. C., and KENNEDY, H. F.

KENNEDY, J. P., *Lieut.-Gen.* Digest of evidence in respect to the Occupation of Land in Ireland. Part 1. *Dublin*, 1847. 8vo.

— Indian Railway Finance. *Tract.* folio. vol. 48.

[*Lond.* 1875.] folio.

— Indian Railways : memorandum on Railway Extension in India, especially with regard to the Gauge Question, Economy of Construction, etc. *Tract.* 8vo. vol. 48. 1874. folio.

— Instruct ; Employ ; don't Hang them : or, Ireland tranquillized without soldiers. *Lond.* 1835. 8vo.

— A Railway Caution !! . . . to enable the poorer districts to provide for themselves the benefits of railway intercourse, and to forewarn the government and the capitalists of British India. *Tract.* 8vo. vol. 100. *Calcutta*, 1849. 8vo.

— Railway Gauge considered in relation to the bulk and weight of goods to be conveyed, more especially in India : report to the Directors of the Bombay, Baroda, and Central India Railway Company. *Tract.* folio. vol. 15. *Lond.* 1872. folio.

KENNEDY, G. G., and SANDARS, J. S. The Law of Drainage and Sewers. *Lond.* 1884. 8vo.

KENNEDY, J. Report on the St. Lawrence Bridge and Manufacturing Scheme. *Tract.* folio. vol. 32. *Montreal*, 1882. folio.

KENNELLY, A. E. Inductance and its proposed Unit, the Henry. *Tract.* 8vo. vol. 493. *New York*, 1890. 8vo.

— Theoretical Elements of Electro-Dynamic Machinery. Vol. 1. (In progress.) *New York*, 1893. 8vo.

KENNET AND AVON CANAL. An Act for making a navigation Canal from the River Kennet at or near Newbury to the River Avon at or near Bath, *etc.* *Lond.* 1794.

— An Act to vary and alter the line of the Canal.

Lond. 1796.

— Acts for enabling the Proprietors of the Canal to complete same, and for amending the Acts passed for making the Canal. *Lond.* 1801, 1805, 1809.

— An authentic description of the Kennet and Avon Canal which are added observations upon the present state of the navigation of the south-western counties of England, and of counties of Monmouth, Glamorgan, and Brecon, in South Wales. *Tract. 8vo. vol. 5.* *Broadbourn,* 1811.

— A comparative statement relative to the Kennet and Avon, Wilts and Berks lines of communication between London and Bristol, with remarks on the canals projected for the purpose of avoiding the navigation of the River Thames. *Tract. 8vo. vol. 1.* *Newbury,* 1810.

— Observations on a scheme for extending the navigation of the rivers Kennet and Avon, so as to form a direct inland communication between London, Bristol, and the West of England, by a canal from Newbury to Bath. *Tract. 8vo. vol. 66.*

Marlborough, 1788.

— Observations on the general comparative merits of inland navigation by Navigations or Railroads, with particular reference to those projected or existing between Bath, Bristol, and London in a letter to C. Dundas, Esq., M.P., by Proprietors of shares in the Kennet and Avon Canal. *Tract. 8vo. vol. 4.* *Bath,* 1825.

KENNEY, C. L. The Gates of the East: ten chapters on the Isthmus of Suez Canal. *Tract. 8vo. vol. 376.* *Lond.* 1857.

KENSINGTON, F. Coal in Catalonia and Asturias, Spain. *8vo. vol. 526.* [*Lond.*] 1892.

KENT, J. G., and Co. American Export Trade Guide for buyers in foreign countries. *New York,* 1879–80.

KENT, W. The Birmingham, Ala., Iron Industry. *Tract. 8vo. vol. 530.* [*New York,* 1892.]

— Evaporative Tests of Steam Boilers, *etc.* *Tract. 8vo. vol. 4.* [*Philadelphia,*] 1883.

— The Strength of Materials.

New York, 1879.

KENT, *County of.* Act for the Improvement of Roads in the County of Kent. *Lond.* 1768, 89.

— Kent, Surrey, and Sussex. Geological map of the south-east of England, reduced from the geological survey, 1868. 1868.
(From the report of the medical officer of the Privy Council for 1868, with corrections.)

— West Kent Drainage Bill. Minutes of Evidence taken before the Select Committee of the House of Lords. *Lond.* 1875.

KENT RAILWAY. The Kent Railway compared with the South Eastern as to tunnels, levels, distances, and population. *Tract. folio. vol. 49.* *Lond.* [1836 ?] folio.

— Prospectus. *Tract. folio. vol. 49.* *Lond.* 1836. folio.

KENT WATERWORKS COMPANY. An Act to enable the Company . . . to raise a further Sum of Money; and to alter and amend the former Acts relating thereto. *Lond.* 1850. folio.

— An Act for the Amalgamation of the North Kent Waterworks Company and their Undertaking and Property with the Kent Waterworks Company and their Undertaking and Property, and for the Dissolution of the North Kent Waterworks Company; and for authorizing the Kent Waterworks Company to raise further Monies; and for other Purposes. 1864.

Lond. 1883. folio.

— Minutes of Proceedings taken before the Select Committee of the House of Lords on the Kent Water Bill. *Lond.* 1885. folio.

(Incomplete.)

— Statement relating to the Supply of Water for Extinguishing Fire, and the Negotiations with the Metropolitan Board of Works for the Provision of Hydrants, etc. *Tract. 8vo. vol. 326.*

Lond. 1876. 8vo.

KENWARD, J. A Note on "Fixed" and "Occulting" Optical Apparatus for Lighthouses. *Birmingham*, 1890. 8vo.

— — [Another edition.] *Tract. 8vo. vol. 505.*

Birmingham, 1892. 8vo.

— A Note on Hyper-radial and other recent Lenses for Lighthouse Illumination. *Tract. 8vo. vol. 480.* *Birmingham*, 1889. 8vo.

— The place of Archæology in Science. *Tract. 8vo. vol. 272.*

Birmingham, 1877. 8vo.

— A Review of Lighthouse Work and Economy in the United Kingdom during the past fifty years (1837–87). *Tract. 8vo. vol. 446.* *Birmingham*, 1887. 8vo.

— — Second Issue.

Birmingham, 1891. 8vo.

— Recent Improvements in Ship Signal-Lights. *Tract. 8vo. vol. 362.*

Birmingham, 1884. 8vo.

— — Third Issue (1889).

Birmingham, 1889. 8vo.

— Ship Lights and Collisions. [2nd Int. Mar. Congr.]

[*Lond.* 1893.] 8vo.

KER, T. Elastic Metal Railway Sleepers in combination with Chairs. *Tract. 8vo. vol. 491.* *Rajputana*, 1890. 8vo.

KERL, B. The Assayer's Manual: an abridged treatise on the Docimastic Examination of Ores, . . . Translated by W. T. Brannt, and edited by W. H. Wahl. *Philadelphia*, 1883. 8vo.

— Repertorium der technischen Literatur, 1854, etc. (1882–1886 by Dr. Rud. Biedermann; 1886, etc., by Dr. Rieth.)

Leipzig, 1871, etc. 8vo.

- KENNET AND AVON CANAL.** An Act for making a navigable Canal from the River Kennet at or near Newbury to the River Avon at or near Bath, *etc.* *Lond.* 1794. folio.
- An Act to vary and alter the line of the Canal. *Lond.* 1796. folio.
- Acts for enabling the Proprietors of the Canal to complete the same, and for amending the Acts passed for making the Canal. *Lond.* 1801, 1805, 1809. folio.
- An authentic description of the Kennet and Avon Canal: to which are added observations upon the present state of the inland navigation of the south-western counties of England, and of the counties of Monmouth, Glamorgan, and Brecon, in South Wales. *Tract.* 8vo. vol. 5. *Broxbourn*, 1811. 8vo.
- A comparative statement relative to the Kennet and Avon, and Wilts and Berks lines of communication between London and Bristol, with remarks on the canals projected for the purpose of avoiding the navigation of the River Thames. *Tract.* 8vo. vol. 5. *Newbury*, 1810. 8vo.
- Observations on a scheme for extending the navigation of the rivers Kennet and Avon, so as to form a direct inland communication between London, Bristol, and the West of England, by a canal from Newbury to Bath. *Tract.* 8vo. vol. 66. *Marlborough*, 1788. 8vo.
- Observations on the general comparative merits of inland communication by Navigations or Railroads, with particular reference to those projected or existing between Bath, Bristol, and London; in a letter to C. Dundas, Esq., M.P., by Proprietors of shares in the Kennet and Avon Canal. *Tract.* 8vo. vol. 4. *Bath*, 1825. 8vo.
- KENNEY, C. L.** The Gates of the East: ten chapters on the Isthmus of Suez Canal. *Tract.* 8vo. vol. 376. *Lond.* 1857. 8vo.
- KENSINGTON, F.** Coal in Catalonia and Asturias, Spain. *Tract.* 8vo. vol. 526. [*Lond.*] 1892. 8vo.
- KENT, J. G., and Co.** American Export Trade Guide for buyers in foreign countries. *New York*, 1879–80. 8vo.
- KENT, W.** The Birmingham, Ala., Iron Industry. *Tract.* 8vo. vol. 530. [*New York*, 1892.] 8vo.
- Evaporative Tests of Steam Boilers, *etc.* *Tract.* 8vo. vol. 476. [*Philadelphia*,] 1883. 8vo.
- The Strength of Materials. *New York*, 1879. 12mo.
- KENT, County of.** Act for the Improvement of Roads in the County of Kent. *Lond.* 1768, 89. folio.
- Kent, Surrey, and Sussex. Geological map of the south-east of England, reduced from the geological survey, 1868. 1868. folio. (From the report of the medical officer of the Privy Council for 1868, with corrections.)
- West Kent Drainage Bill. Minutes of Evidence taken before the Select Committee of the House of Lords. *Lond.* 1875. folio.

KENT RAILWAY. The Kent Railway compared with the South Eastern as to tunnels, levels, distances, and population. *Tract. folio. vol. 49.* *Lond.* [1836?] folio.

— Prospectus. *Tract. folio. vol. 49.* *Lond.* 1836. folio.

KENT WATERWORKS COMPANY. An Act to enable the Company . . . to raise a further Sum of Money; and to alter and amend the former Acts relating thereto. *Lond.* 1850. folio.

— An Act for the Amalgamation of the North Kent Waterworks Company and their Undertaking and Property with the Kent Waterworks Company and their Undertaking and Property, and for the Dissolution of the North Kent Waterworks Company; and for authorizing the Kent Waterworks Company to raise further Monies; and for other Purposes. 1864.

Lond. 1883. folio.

— Minutes of Proceedings taken before the Select Committee of the House of Lords on the Kent Water Bill. *Lond.* 1885. folio.
(Incomplete.)

— Statement relating to the Supply of Water for Extinguishing Fire, and the Negotiations with the Metropolitan Board of Works for the Provision of Hydrants, etc. *Tract. 8vo. vol. 326.*

Lond. 1876. 8vo.

KENWARD, J. A Note on "Fixed" and "Occulting" Optical Apparatus for Lighthouses. *Birmingham,* 1890. 8vo.

— [Another edition.] *Tract. 8vo. vol. 505.*

Birmingham, 1892. 8vo.

— A Note on Hyper-radial and other recent Lenses for Lighthouse Illumination. *Tract. 8vo. vol. 480.* *Birmingham,* 1889. 8vo.

— The place of Archæology in Science. *Tract. 8vo. vol. 272.*

Birmingham, 1877. 8vo.

— A Review of Lighthouse Work and Economy in the United Kingdom during the past fifty years (1837–87). *Tract. 8vo. vol. 446.* *Birmingham,* 1887. 8vo.

— Second Issue.

Birmingham, 1891. 8vo.

— Recent Improvements in Ship Signal-Lights. *Tract. 8vo. vol. 362.*

Birmingham, 1884. 8vo.

— Third Issue (1889).

Birmingham, 1889. 8vo.

— Ship Lights and Collisions. [2nd Int. Mar. Congr.]

[*Lond.* 1893.] 8vo.

KER, T. Elastic Metal Railway Sleepers in combination with Chairs. *Tract. 8vo. vol. 491.* *Rajputana,* 1890. 8vo.

KERL, B. The Assayer's Manual: an abridged treatise on the Docimastic Examination of Ores, . . . Translated by W. T. Brantt, and edited by W. H. Wahl. *Philadelphia,* 1883. 8vo.

— Repertorium der technischen Literatur, 1854, etc. (1882–1886 by Dr. Rud. Biedermann; 1886, etc., by Dr. Rieth.)

Leipzig, 1871, etc. 8vo.

- KERL, B.—*continued*. Treatise on the Assaying of Lead. 1868.
See BODEMANN, T., and KERL, B.
- KERNOT, W. C. The Arithmometer. *Tract. 8vo. vol. 409.*
Melbourne, 1885. 8vo.
- Floods on the River Barwon. *Tract. 8vo. vol. 406.*
Melbourne, 1885. 8vo.
- Notes on Iron Arches. *Tract. 8vo. vol. 413.*
Melbourne, 1885. 8vo.
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Melbourne, 1879. 8vo.
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Melbourne, 1886. 8vo.
- On the Design of Iron Girders with open webs. *Tract. 8vo. vol. 410.*
Melbourne, 1883. 8vo.
- Report on Derwent Valley Bridges. 1886. See DERWENT VALLEY.
- KERPELY, A. von. Bericht über die Fortschritte der Eisenhütten-Technik, 1864–1883. 15 vols. Leipzig, 1866–1886. 8vo.
- — Neue Folge. Herausgegeben von Dr. Bernhard Kosmann, 1884, etc. Leipzig, 1887, etc. 8vo.
- KERR, Rev. J. The Metric System, etc. *Tract. 8vo. vol. 202.*
Lond. 1863. 8vo.
- KERR, R. The English Gentleman's House : or, how to plan English residences . . . With tables of accommodation and cost and a series of selected plans. 2nd edition. Lond. 1865. 8vo.
- On Ancient Lights, and the evidence of surveyors thereon ; with tables for the measurement of obstructions. *Tract. 8vo. vol. 385.*
Lond. 1865. 8vo.
- KERR, W. C. Report on the Cotton Production of the State of North Carolina, etc. [*U.S.A. 10th Census. Vols. 5 and 6.*]
Washington, 1884. 4to.
- Report on the Cotton Production of the State of Virginia, etc. [*U.S.A. 10th Census. Vols. 5 and 6.*] Washington, 1884. 4to.
- KESSELS, H. Technologische Terminologie. Prag, 1864. 8vo.
- KESSLITZ, W. Magnetische Beobachtungen an den Küsten der Adria, etc. 1892. See LASCHNER, F., and KESSLITZ, W.
- KETCHUM, H. G. C. Chignecto Marine Transport Railway. The Isthmian Transit between the Bay of Fundy and the Gulf of St. Lawrence. *Tract. 8vo. vol. 340.*
Lond. 1884. 8vo.
- The cost, feasibility and advantage of a Ship Railway across the Isthmus of Chignecto. *Tract. 8vo. vol. 340.*
Sackville, N.Br., 1882. 8vo.
- Report on the sources of Water Supply for the city of Fredericton. *Tract. 8vo. vol. 262.*
Fredericton, 1876. 8vo.
- KEUX, J. LE. See LE KEUX, J.

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(Official.) *Lond.* 1878. folio.
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Lond. 1883, *etc.* 8vo.
(From the Proceedings of the Royal Society.)
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Lond. 1847. 8vo.
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Sheffield, 1883. 8vo.
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- KEYSLER, J. G.** Travels through Germany, Bohemia, Hungary, Switzerland, Italy, and Lorrain, . . . Translated from the 2nd edition of the German. 3rd edition. 4 vols. *Lond.* 1760. 8vo.
- KEYSTONE BRIDGE COMPANY.** Examples of Structures built by the Keystone Bridge Company. *Pittsburgh, Pa.*, [.] folio.
- Illustrated album, embracing iron bridges, roofs, columns, chords, links, *etc.* *Tract.* 4to. vol. 95. *Pittsburgh*, 1874. 4to.
- KHOKAND, Turkestan.** Papers relating to . . . a Visit to Kokan, *etc.* [*Records of the Govt. of India (Foreign Dep.)* No. 39.]
Calcutta, 1863. 8vo.
- KIAMA.** Minutes of Evidence relating to the proposed extension of the Railway from Kiama to Nowra, into the Town of Nowra.
Sydney, 1891. folio.
- KICK, F.** Flour Manufacture: a treatise on Milling Science and Practice. Translated from the second . . . edition, with supplement by H. H. P. Powles. *Lond.* 1888. 8vo.
- Mehl, Mehlfabricate und die Maschinen und Apparate der Müllerei und Bäckerei. (Bericht herausgegeben durch die General-Direction der Weltausstellung, 1873.) *Tract.* 8vo. vol. 336. *Wien*, 1873. 8vo.
- Studie über Handfertigkeits- oder Werkstatt-Unterricht. *Tract.* 8vo. vol. 445. *Prag*, 1887. 8vo.
- Technologische Studien über Materialien und deren Formveränderungen. *Tract.* 8vo. vol. 473. *Prag*, 1882. 8vo.

- KIDD, J. An introductory Lecture to a Course in Comparative Anatomy, illustrative of Paley's Natural Theology. 2nd edition. *Tract. 8vo. vol. 192. Lond. 1826. 8vo.*
- On the Adaptation of External Nature to the physical condition of man. 1837. *See BRIDGEWATER TREATISES. No. 2.*
- KIDSTON, C. Report by the Dredging committee on Hopper Barges, to the Trustees of the Clyde navigation. *Tract. 8vo. vol. 198. Glasgow, 1862. 8vo.*
- Report by the Dredging Committee, on the disposal of Dredgings, to the Trustees of the Clyde navigation. *Tract. 8vo. vol. 198. Glasgow, 1862. 8vo.*
- KIDWELLY, *Cararthenshire.* Act for the improvement of the Harbour of Kidwelly, and for making a Canal or Tram Roads in Kidwelly and Llanelly, etc. *Lond. 1812. folio.*
- KIELMANN, C. E. Guide pratique de drainage. *Tract. 8vo. vol. 247. Paris, 1857. 8vo.*
- KIEPENHEUER, F. Statistik über die Dauer der Schienen auf den Bahnen des Vereins Deutscher Eisenbahn-Verwaltungen. *Tract. 4to. vol. 82. Wiesbaden, 1879. 4to.*
- KIERMAN, G. Continuous Pneumatic Railway Brakes. *Tract. 8vo. vol. 443. Manchester, 1887. 8vo.*
- KILGOUR, G. Railway Extension in the Colony of the Cape of Good Hope, etc. *Tract. folio. vol. 31. Cape Town, 1881. folio.*
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- KILLALLY, J. A Plan for making the Philipstown level the summit level of the Grand Canal [Ireland], by lowering the present summit 16 feet, etc. [Map only.] *Tract. 4to. vol. 34. 1808. 4to.*
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- KILLEBREW, J. B. Report on the Culture and Curing of Tobacco in the United States. [*U.S.A. 10th Census. Vol. 3.*] *Washington, 1883. 4to.*
- KILMARNOCK. An Act for supplying with Water the Town of Kilmarnock, etc. *Lond. 1846. folio.*
- KIMBALL, A. L. The Physical Properties of Gases. *Lond. 1890. 8vo.*
- KIMBALL, W. W., *Lieut.* Special Intelligence Report on the Progress of the Work on the Panama Canal during 1885. By W. W. Kimball, assisted by W. L. Capps. *Tract. 8vo. vol. 444. Washington, 1886. 8vo.*

- KIMBER, J. Midnapore Canal, Bengal. *Calcutta*, 1876. folio.
- KINAHAN, G. H. Valleys and their relation to Fissures, Fractures, and Faults. *Lond.* 1875. 8vo.
- KINCAID, J. Birmingham Central Tramways Co., etc. 1887. See PRITCHARD, E., and KINCAID, J.
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- KING, D. De Sargues' universal Way of Dyaling; together with the manner of drawing the lines of the signs, of finding out the height of the sun above the horizon, and the east rising of the same, the elevation of the pole, and the position of the meridian. *Lond.* 1659. 4to.
- KING, E. Remarks on the Signs of the Times. *Tract.* 4to. vol. 58. *Lond.* 1798. 4to.
- KING, F. H. Observations and Experiments on the Fluctuations in the Level and Rate of Movement of Ground-Water on the Wisconsin Agricultural Experiment Station Farm and at Whitewater. [*U.S. Dep. of Agriculture. Weather Bulletin*, 5.] *Washington*, 1892. 8vo.
- KING, J. W. The Channel Pilot. 2 parts. *Lond.* 1856–59. 8vo.
- The War-Ships and Navies of the World. 2nd edition. *Boston*, 1881. 8vo.
- The Pilot's handbook for the English Channel. 7th edition. *Lond.* 1876. 8vo.
- KING, M. Argideen District, County of Cork. Report . . . on the Drainage of the Lands in the above District. *Dublin*, 1847. 8vo.
- Ballinhassig District, County of Cork. Supplemental Report . . . on the Drainage and Improvement of the Lands in the above District. *Dublin*, 1849. 8vo.
- Castlemartyr District, County of Cork. Report . . . on the Drainage and Improvement of the Lands in the above District. *Dublin*, 1847. 8vo.

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- KING, W. B. Treatise on the Science and Practice of the Manufacture and distribution of coal gas. Edited by J. Newbigging and W. J. Fewtrell. 3 vols. *Lond.* 1878. 4to.
- KING, W. H. Lessons and practical Notes on Steam, the Steam Engine, Propellers, *etc.* 13th edition. *New York*, 1870. 8vo.
- KING, W. P. On the Mis-use of Cement on iron Transport Ships, *etc.* *Tract*. 4to. vol. 69. *Lond.* 1872. 4to.
(From Transactions of the Institution of Naval Architects.)
- KING, W. R. Report on certain experimental and theoretical Investigations relative to the quality, form, and combination of materials for Defensive Armor, *etc.* [*Professional Papers, Corps of Engineers, U.S. Army*. No. 17.] *Washington*, 1870. 4to.
- KING'S COLLEGE, *London*. Calendar for 1879–80, (1881–82, *etc.*) *Lond.* 1879, *etc.* 8vo.
- KING'S LYNN. Complaints of the Merchants, Mariners, and Watermen of Lynn, about navigation. *Tract*. 4to. vol. 54. 1724. 4to.
- Information respecting the proposed new Water Scheme [for the Borough of King's Lynn]. *Tract*. 8vo. vol. 506. *King's Lynn*, 1893. 8vo.
- Port and Harbour of King's Lynn. Report on the Outfall of the River Ouse. By W. H. Wheeler. *King's Lynn*, 1882. folio.
- KINGSBRIDGE, *Devon*. Report on the circumstances attending an Explosion at the house of Mr. J. Balkwill, Chemist, Kingsbridge, Devon, on Oct. 30th, 1884. *Lond.* 1884. folio.
- KINGSFORD, W. The Canadian Canals: their history and cost. *Toronto*, 1865. 8vo.
- A Canadian Political Coin. *Tract*. 8vo. vol. 295. *Ottawa*, 1874. 8vo.
- KINGSLEY, J. Sewerage, the Steam Engine and Coals superseded. *Tract*. 8vo. vol. 105. *Lond.* 1859. 8vo.
- KINGSTON, *Canada*.—*Queen's College and University*. Calendar. Session 1883–84, (1884–85, *etc.*) *Kingston*, 1883, *etc.* 8vo.
- Examination Papers, 1886, (1887, *etc.*) (1889 wanting.) *Kingston*, 1888, *etc.* 8vo.
- KINGSTON, J. Report on the Outfalls of the Rivers Witham and Welland and the projected Scheme of improvement, *etc.* *Tract*. 8vo. vol. 322. *Lond.* 1879. 8vo.
- KINGSTON BAY, *S. Australia*. Kingston and Rivoli Bay Piers. The award of the umpire. *Adelaide*, 1878. folio.

- KINGSTOWN AND DUBLIN CANAL. Report of the Committee.
Tract. 8vo. vol. 277. Dublin, 1833. 8vo.
- KINGZETT, C. T. The History, Products and Processes of the Alkali Trade.
Lond. 1877. 8vo.
- KINIPPLE, W. R. Monolithic Construction of Sea Works under water by Cement Grouting. [2nd Int. Mar. Congr.]
[*Lond. 1893.*] 8vo.
- Subaqueous Foundations. *Chatham, 1890. 8vo.*
- KIPPING, R. Elementary treatise on Sails and Sail-making; . . .
7th edition, enlarged. *Lond. 1865. 8vo.*
- Rudimentary treatise on Masting, Mastmaking, and Rigging of ships. Together with an Appendix of dimensions of masts and yards of the Royal Navy of Great Britain and Ireland. 10th edition.
Lond. 1866. 8vo.
- KIRBY, C. A Pictorial Handbook of Newport (Mon.), with some account of the Old Port of Caerleon. *Cardiff, 1891. 8vo.*
- Plan of Monmouthshire, with part of Gloucestershire, and of Glamorganshire; showing the existing railways and proposed schemes for session 1865 (1866). *Newport, 1864, 65. folio.*
- Plan of Newport, Caerleon, and Maindee, in the county of Monmouth; showing the proposed railway and dock schemes. Session 1865, 66. *Newport, 1864, 65. folio.*
- KIRBY, W. On the History, Habits, and Instincts of Animals. 1835. See BRIDGEWATER TREATISES. No. 7.
- KIRCHHOFF, G. Untersuchungen über das Sonnenspectrum und die Spectren der chemischen Elemente. 2 vols.
Berlin, 1862–63. 4to.
- KIRK, —, and RANDALL, —. Kirk and Randall *versus* the East and West India Dock Company. *Lond. 1885, 86. folio.*
(Incomplete.)
- KIRK, A. C. Introductory Address as President of the Institution of Engineers and Shipbuilders in Scotland, *etc. Tract. 8vo. vol. 448. Glasgow, 1887. 8vo.*
- KIRK, E. The Founding of Metals: a practical treatise on the melting of iron, with a description of the founding of alloys.
New York, 1878. 8vo.
- KIRK, T. Fruit Blights, and Diseases of Fruit-Trees. Interim Report. *Tract. 8vo. vol. 486. Sydney, 1889. 8vo.*
- KIRKALDY, D. Experimental inquiry into the properties of Essen and Yorkshire wrought-iron plates. *Tract. 4to. vol. 79. Lond. 1875. 4to.*
- Letter to the President and Council of the Institution of Mechanical Engineers. *Tract. 4to. vol. 84. Lond. 1880. 4to.*
- Results of an experimental inquiry into the tensile strength . . . of Wrought-Iron and Steel. 2nd edition. *Glasgow, 1863. 8vo.*

- KIRKALDY, D.—*continued*. Results of an experimental inquiry into the mechanical properties of Steel, of different degrees of hardness, . . . manufactured by C. Aspelin, Westanfors and Fagersta Works, Sweden. *Lond.* 1873. 4to.
- Tabulated Results of experiments to ascertain the mechanical Properties of Messrs. Vivian & Sons' Ferro-Bronze Rolled Bars. *Tract.* 4to. vol. 108. *Lond.* 1887. 4to.
- See BARLOW, P. A Treatise on the Strength of Materials . . . To which is added a summary of experiments by . . . D. Kirkaldy, *etc.* 1867.
- KIRKALDY, J. Feed-Water Heating practically and commercially considered. *Tract. folio.* vol. 50. *Lond.* 1888. folio.
- Kirkaldy's "Compactum" Patent Feed-Water Heater. *Tract. folio.* vol. 50. *Lond.* [1891?] folio.
- System of heating Feed-Water with live steam. MS. With Reprint from "The Engineer," July 3rd, 1891. *Tract. folio.* vol. 50. 1891. folio.
- KIRKALDY, W. G. Illustrations of David Kirkaldy's System of Mechanical Testing. Comprising a large selection of Tabulated Results, . . . with explanatory text and historical sketch. *Lond.* 1891. 8vo.
- KIRKHAM, T. N. Experiments on the illuminating Power of Gas. MS. (Atlas of diagrams) *Lond.* 1868. folio.
- The Theory of the Jet-photometer and duration test. *Lond.* 1869. 8vo.
- KIRKHAM, T. N., and HERSEY, T. Gas Lighting *v.* Electric Lighting: their comparative cost and value. *Tract.* 8vo. vol. 361. *Lond.* 1878. 8vo.
- KIRKLAND, W. A., *Commander, U.S.N.* Report on the Vienna Exhibition, Ordnance and Marine material. *Tract.* 8vo. vol. 267. *Washington,* 1874. 8vo.
- KIRKMAN, M. M. Railway Expenditures: their extension, object and economy. 2 vols. *Chicago,* [1880.] 8vo.
- Railway Revenue. *New York,* 1879. 8vo.
- Railway Service, Baggage Car Traffic (Train and Stations). 2 parts. *New York,* 1878. 8vo.
- KIRKPATRICK, T. S. G. The Hydraulic Gold Miner's Manual, *etc.* *Lond.* 1890. 8vo.
- KIRKWOOD, J. P. The Brooklyn Waterworks and Sewers, *etc.* *New York,* 1867. 4to.
- Collection of reports, and opinions of chemists in regard to the use of Lead Pipe for service pipe in the distribution of water for the supply of cities. *New York,* 1859. 8vo.
- Report on the Filtration of River Waters, for the supply of cities, as practised in Europe, *etc.* *New York,* 1869. 4to.

- KIRKWOOD, J. P.—*continued*. Report on the Improvement of the Harbour of Montreal, *etc.* 1857. See CHILDE, J., MCALPINE, W. J., and KIRKWOOD, J. P.
- A special Report on the Pollution of Rivers.
Brooklyn, 1875. 8vo.
- KITT, A. Remarks on the Management of Clay Retorts. *Tract.* 8vo. vol. 384. Lond. 1862. 8vo.
- KITTLER, E. Handbuch der Elektrotechnik. Bd. 1, (Bd. 2, 1 Hälfte.) (No more published.) Stuttgart, 1886–90. 8vo.
- KLASEN, L. Die Blitzableiter in ihrer Construction und Anlage. *Tract.* 8vo. vol. 329. Leipzig, 1879. 8vo.
- Handbuch des Hochbau-Constructionen in Eisen und anderen Metallen. Leipzig, 1876. 8vo.
- KLASEN, P. J. [8 Reports on the drainage of various districts in Ireland.] Dublin, 1847–51. 8vo.
- KLEIN, E. Report upon a Bacteriological and Microscopical Investigation of the results of experiments made with the "Amines" Process, *etc.* *Tract.* 8vo. vol. 496. Lond. 1889. 8vo.
- Second Report upon Investigations in connection with the "Amines" Process. *Tract.* 8vo. vol. 496. Lond. 1889. 8vo.
- Report of his series of Investigations to determine the power of "Amines" Disinfectant on pathogenic micro-organisms. *Tract.* 8vo. vol. 496. Lond. 1890. 8vo.
- KLEIN, H. J. Relations réciproques des grands agents de la nature d'après les travaux récents de Hirn et Clausius. *Tract.* 4to. vol. 98. Paris, 1886. 4to.
- KLEIN, J. F. Elements of Machine Design, *etc.*
Bethlehem, Pa., 1889. 8vo.
- KLEIN, L. von. Sammlung eiserner Brücken-Constructionen. Part 1. (Atlas of plates.) Stuttgart, 1860, 73. folio.
- KLEMM, L. W. Die Eisenbahnen nach Anlage, Bau, und Betrieb, *etc.* *Tract.* 8vo. vol. 256. Stuttgart, 1844. 8vo.
- KLETT, J. Die Kragträgerbrücken in Deutschland. *Tract.* 4to. vol. 116. Berlin, [] 4to.
- Die neueren Transportarten auf Flüssen und Canälen und ihre Anwendung in Deutschland. *Tract.* 8vo. vol. Hannover, 1881. 4to.
- Studie über die Klappenwehre und ähnliche Systeme. *Tract.* folio. vol. 43. Wien, 1874. folio.
- KLETZSCH, A. P. Cylinder condensation in Steam Engines. 1885. See GATELY, G. L., and KLETZSCH, A. P.
- KLINT, G., Admiral. Sailing Directions for the Baltic Sea and the Gulf of Finland. *Tract.* 8vo. vol. 113. Lond. 1854. 8vo.

- KLODEN, C. F. Neueste Post-karte durch ganz Deutschland und Frankreich bis Paris durch Ober-Italien, Oestreich, Ungarn, Preussen, Pohlen und Dänemark. *Paris*, 1813. 8vo.
- KLÖTZER, H. Uebersichtliche Darstellung der Lagerungsverhältnisse der Kohlenflötze der Zwichauer Bassins. *Dresden*, 1852. 8vo.
- KLUNZINGER, P. Beitrag zur Lösung der Aufgabe aus dem Verlauf eines Niederschlages den Verlauf des Hochwassers zu bestimmen, etc. *Tract. 8vo. vol. 430. Wien*, 1882. 8vo.
- Project der Einwölbung des Wienflusses. *Tract. 8vo. vol. 430. Wien*, 1882. 8vo.
- Ueber die Beziehungen der Flussregulirungs-Systeme zu dem Verlaufe der Hochwässer. *Tract. 8vo. vol. 430. Wien*, 1886. 8vo.
- KNAB, L. Fabrication et emplois industriels de l'acier. *Paris*, 1889. 8vo.
- KNÄBEL, A. Die Fabrikation der Oele und Einrichtung der Oelmühlen sowie der Fabrikation der Pottasche, etc. *Tract. 8vo. vol. 330. Leipzig*, 1881. 8vo.
- KNAPP, F. Chemical Technology; or, chemistry applied to the arts and manufactures. Edited, with . . . additions, by Dr. E. Ronalds and Dr. T. Richardson. 2 vols. *Lond.* 1848. 8vo.
- See SCHILLING, N. H. Handbuch für Steinkohlengas-Beleuchtung. Mit einer Geschichte der Gasbeleuchtung von Dr. F. Knapp. 1860.
- KNAPP, H. F. Deepening Sandy Hook Bar, Port of New York. *Tract. 8vo. vol. 321. [New York,] 1881.* 8vo.
- Mouth of the Mississippi. With special reference to the various plans for deepening its bar. *Tract. 8vo. vol. 291. New York*, 1876. 8vo.
- KNARESBOROUGH CANAL. Report of the Committee appointed to procure the levels, surveys, and estimates of the proposed Knaresbro' Canal, in the West Riding of the county of York. *Tract. 8vo. vol. 6. York*, 1802. 8vo.
- KNARESBOROUGH RAILWAY. Report of the Committee. *Tract. 8vo. vol. 2. Leeds*, 1818. 8vo.
- KNAUDT, S., and Co. Ueber Wellrohre. Entgegnung . . . auf die gleichbetitelte Broschüre der Herren F. Schmitz & C. Mongenast. *Tract. 8vo. vol. 483. Essen*, [. . .] 8vo.
- KNAUFF, M. Kanalization der Residenzstadt Potsdam nach dem Shone-System. *Berlin*, 1885. 8vo.
- KNEUSEL-HERDLICZKA, E., and MIRÖSEVIC, H. Resultate aus den meteorologischen Beobachtungen an dem K. K. Hydrographischen Amte (Marinesternwarte) zu Pola vom August, 1864, bis ende December, 1881. *Tract. 8vo. vol. 474. Pola*, 1882. 8vo.

- KNEUSEL-HERDLICZKA, E., and PICH, L. Beschreibung der an dem K. K. hydrographischen Amte zu Pola in Verwendung stehenden meteorologischen Instrumente. *Tract. 8vo. vol. 456.* Pola, 1882. 8vo.
- KNIGHT, CAMERON. The Mecanician : a treatise on the Construction and Manipulation of Tools. *Lond. 1881. 4to.*
- The Study of Engineering, etc. *Tract. 8vo. vol. 205.* Erith, 1869. 8vo.
- KNIGHT, CHARLES. The English Cyclopædia : a new dictionary of universal knowledge, etc. 8 vols. *Lond. 1859-61. 4to.*
- KNIGHT, E. H. The Practical Dictionary of Mechanics : being a description of tools, instruments, machines, etc. 4 vols. *Lond. [1877-84.] 8vo.*
- KNIGHT, G. Smith, Knight, and Company. Address to shareholders. *Tract. 8vo. vol. 58.* Westminster, 1865. 4to.
- KNIGHT, Sir H. E., and OTHERS. Metropolis Water. Correspondence from the "City Press," etc. *Tract. 8vo. vol. 359.* Lond. 1884. 8vo.
- KNIGHT, H. H., and MOXHAM, E. Specimens of Inlaid Tiles, heraldic and geometrical, from Neath Abbey, Glamorganshire. *Edinburgh, [] folio.*
- KNIGHT, J. Report upon the Plan of Construction of several of the principal Railroads in the northern and middle States, and upon a railway structure for a new track on the Baltimore and Ohio railroad. *Tract. 8vo. vol. 81.* Baltimore, 1838. 8vo.
- KNIGHT, J. G. A treatise on Colonial Building Stones. *Tract. 8vo. vol. 126.* Melbourne, [1859.] 8vo.
- KNIGHT, J. M. Vestry of the Hamlet of Mile End Old Town. Report of the Surveyor to the Vestry on Railway and other schemes affecting the Hamlet. *Tract. 8vo. vol. 478.* Lond. 1874. 8vo.
- KNIGHT, P. Erris in the "Irish Highlands" and the "Atlantic Railway." Appendix. *Dublin, 1836. 8vo.*
- KNIGHT, SPARROW. The Coals from Se-shan (the hills west of Peking). *Tract. folio. vol. 9.* 1867. folio.
- KNIGHT AND TEMPLAR, Ship. Report on the Loss of the "Knight and Templar." *Lond. 1873. folio.*
- KNIGHT-BAILEY, B. Patent Wrought Iron and Cement protected Pipe for water supply of cities and villages. *Tract. 8vo. vol. 235.* Jersey City, 1872. 8vo.
- KNIFE, J. A. Geological Map of the British Isles and part of France. 2nd edition, revised. *Lond. 1873. 8vo.*
- KNOKE, J. O. Die Kraftmaschinen des Kleingewerbes. *Berlin, 1887. 8vo.*
- Versuche zur Ermittlung der Wärmeverteilung in Dampfmaschinen. *Tract. 4to. vol. 110.* Berlin, [] 4to.

- KNOWLES, Sir F. C. On the Archimedian Screw Propeller, or Helix, of Maximum Work. *Lond.* 1871. 8vo.
(From Min. Proc. Inst. C.E.)
- A Proposal for heating large towns with Pyrogen Gas. *Tract.* 8vo. vol. 235. *Lond.* 1874. 8vo.
- KNOWLES, J. The Elements and Practice of Naval Architecture; or, a treatise on shipbuilding . . . 3rd edition, with an Appendix, containing the principles and practice of constructing the royal and mercantile navies, as invented and introduced by Sir Robert Seppings. (Atlas of plates.) *Lond.* 1822. 4to. and folio.
- An Inquiry into the means which have been taken to preserve the British Navy . . . from that species of decay now denominated Dry Rot. *Lond.* 1821. 4to.
- A pronouncing and explanatory Dictionary of the English Language . . . 4th edition. *Lond.* 1837. 8vo.
- KNOWLTON, F. H. Fossil Wood and Lignite of the Potomac Formation. [*U.S. Geol. Survey.* Bulletin No. 56.] *Washington*, 1889. 8vo.
- KOCH, F. Institut du Fer et de l'Acier. Meeting d'Octobre, 1881. *Tract.* 8vo. vol. 466. *Liège*, 1881. 8vo.
- KOCH, H. Preisgekrönter Concurrenz-Entwurf für das Museum des Königreiches Böhmen. *Prague*, 1884. folio.
- KOCH, R., *Prof.* Bericht über die Untersuchungen des Berliner Leitungswassers in der Zeit vom 1 Juni 1885 bis 1 April, 1886. *Tract.* 4to. vol. 104. *Berlin*, 1887. 4to.
- KOCH, R., *Engineer.* Das Lokomotivführer—Examen, Fragebuch, etc. 1879. See BROSIUS, J., and KOCH, R.
- Die Schule des Locomotivführers, etc. 1879. See BROSIUS, J., and KOCH, R.
- KOCK, A. W. T. Notice sur les grands ponts fixes pour chemins de fer dans les Pays-Bas. 1885. See BUYS, P. H. A. M., and KOCK, A. W. T.
- KOECHLIN, M. Applications de la statique graphique. *Paris*, 1889. 8vo.
- KOENIG, J. Die Verunreinigung der Gewässer, deren schädliche Folgen, nebst Mitteln zur Reinigung der Schmutzwässer, etc. *Berlin*, 1887. 8vo.
- KOEP, C. Der Panama-Canal, sein Bau und seine Zukunft. *Tract.* 8vo. vol. 430. *Dresden*, 1886. 8vo.
- KOHL, B. E. Das fünfzigjährige Jubiläum der belgischen Eisenbahnen und der damit verbundene Internationale Eisenbahn-Congress in Brüssel im August, 1885. *Tract.* 8vo. vol. 416. *Leipzig*, 1886. 8vo.
- Über den Ursprung der Quellen. *Tract.* 8vo. vol. 471. *Leipzig*, 1884. 8vo.
- KOHL, F. Geschichte der Jacquard-Maschine. *Berlin*, 1872. 4to.

- KÖHLER, G. Die Störungen der Gänge, Flütze und Lager. *Tract.* 8vo. vol. 411. Leipzig, 1886. 8vo.
- KÖHLER, O. Theorie der Gasmotoren. Leipzig, 1887. 8vo.
- KOHLFÜRST, L. Die elektrischen Einrichtungen der Eisenbahnen und das Signalwesen. Wien, 1883. 8vo.
- Die elektrischen Wasserstands-Anzeiger. *Tract.* 8vo. vol. 326. Berlin, 1881. 8vo.
- KOHLRAUSCH, F., Dr. An Introduction to Physical Measurements. With appendices on Absolute Electrical Measurement, etc. 2nd edition. Translated from the German, etc. Lond. 1883. 8vo.
- KOHN, F. Iron and Steel Manufacture, etc. Lond. 1873. folio.
(Reprinted from "Engineering.")
- KOHN, J. Die Kirche San Lorenzo in Mailand. Berlin, 1890. folio.
- KOLBE, J., and BERGER, R. Reden gehalten von . . . J. Kolbe und . . . R. Berger bei der Enthüllung der Prechtl-Büste an der k. k. technischen Hochschule in Wien am 11 Juni 1892. *Tract.* 8vo. vol. . . Wien, 1892. 8vo.
- KÖNIG, E. Der erste deutsche Luftschiffer in Berlin. *Tract.* 4to. vol. 99. Breslau, [.] 4to.
- KÖNIGLICH-SÄCHSISCHE BERGAKADEMIE. Katalog der Bibliothek der Königlich Sächsischen Bergakademie. I. Theil. Freiberg, 1879. 8vo.
- KONINCK, L. DE. Mémoire sur les propriétés et l'analyse de la phloridzine. *Tract.* 8vo. vol. 191. Louvain, 1836. 8vo.
- KONINKLIJK INSTITUUT VAN INGENIEURS. Algemeen verslag van de werkzaamheden en notulen der vergaderingen. 's Gravenhage, 1847-69. 8vo.
- Catalogus van eene verzameling kaarten, berustende op de bibliotheek der Utrechtsche Hoogeschool. 's Gravenhage, 1850. 8vo.
- Charter, list of members and rules of the Institute.
- Register op de werken. 's Gravenhage, 1875. 8vo. and 4to.
- Uittreksels uit meemde tijdschriften tendienste der leden. 's Gravenhage, 1849-69. 8vo.
- Verhandelingen. 's Gravenhage, 1848, etc. 8vo.
- Onderzoek van de draagkracht van stalen en ijzeren liggers. *Tract.* 4to. vol. 113. 's Gravenhage, 1884. 8vo.
- Investigation into the Strength of Steel and Wrought Iron Girders. Translated by H. T. H. Siccama. [MS.] [1885.] folio.
- Répertoire des cartes de l'empire français. *Tract.* 8vo. vol. 114. La Haye, 1856. 8vo.
- KONINKLIJKE AKADEMIE VAN WETENSCHAPPEN. Vierde (vijfde, zesde) verslag, over den paalworm, uitgegeven door de Natuurkundige Afdeeling der . . . Akademie. [With MS. translations.] Amsterdam, 1863-65. 8vo.

- KONSTANTINOFF, —, *Major-general*. Application des fuseés au jet des amarres de sauvetage. *Tract. folio. vol. 1.*
St. Pétersbourg, 1863. folio.
- Lectures sur les fusées de guerre, etc. *Paris, 1861. 8vo.*
- KÖNYVES-TOTH, M. Der Durchschlag des St. Gotthard-Tunnels. *Tract. 8vo. vol. 427.*
Zürich, 1880. 8vo.
- KÖPCKE, —, and HARTIG, E. Versuche über das Verhalten des Flusseisens und Flusstahles in grosser Kälte. *Tract. 4to. vol. 117.*
[Leipzig, 1892.] 4to.
- KOPP, H. Annual Report of the Progress of Chemistry, etc. 1849–53. See LIEBIG, J. VON, Baron, and KOPP, H.
- KORB, F., and TURNER, T. The Manufacture of Styrian Open-Hearth Steel, with some notes on the treatment of Tool Steel, etc. *Tract. 8vo. vol. 480.*
Brierley-Hill, 1889. 8vo.
- KOŘISTKA, C. Der höhere polytechnische Unterricht in Deutschland, etc. *Tract. 8vo. vol. 399.*
Gotha, 1863. 8vo.
- KOSTER, J. T. Description of a new or improved Method of constructing Wheel Carriages; to which are prefixed some observations on wheel carriages in general. *Tract. 8vo. vol. 15.*
Liverpool, 1819. 8vo.
- KÖSTLIN, A. Die Bauvollendung des neuen Hafens in Triest. Feierliche Schlusssteinlegung am 19 Dezember, 1883. *Tract. folio. vol. 43.*
Wien, 1884. folio.
- KOWIE HARBOUR. Reports of the Select Committee on the improvement, etc. *Cape Town, 1863, 68. 8vo.*
- KRAFFT, J. C. Plans, coupes, et élévations de diverses productions de l'art de la charpente. *Strasbourg, 1805. folio.*
- Portes cochères et portes d'entrée de Paris. (*French, English, and German.*) *Paris, 1810. 4to.*
- Recueil d'architecture civile, contenant les plans, coupes et élévations des châteaux, maisons de campagne, et habitations rurales . . . situés aux environs de Paris, avec les décorations intérieures, etc. *Paris, 1812. folio.*
- KRAFT, J. Roue hydraulique à aubes courbes, système Poncelet. Considérations théoriques et règles pratiques, etc. *Tract. 4to. vol. 71.*
Paris, 1859. 4to.
- KRAFT, J., and LIBERT, W. Les causes de l'accident à la passerelle entre la rue Régence et le boulevard Saucy. *Tract. folio. vol. 29.*
Liège, 1881. folio.
- KRAMER, A. Note sur l'exploitation par l'État des chemins de fer en Autriche. *Tract. 8vo. vol. 435.*
Paris, 1887. 8vo.
- KRANS, F. Étude sur le four à gaz et à chaleur régénérée de M. Siemens. *Tract. 8vo. vol. 198.*
Bruxelles, 1869. 8vo.

- KRANTZ, J. B. Amélioration de la navigation de la Seine entre Paris et Rouen. 3 vols. (Atlases of plates.) *Paris*, 1871. 4to.
- Étude sur les murs de réservoirs. *Paris*, 1870. 8vo.
- Study on reservoir walls. Translated by F. A. Mahan. *New York*, 1883. 8vo.
- Notice sur la vie et les travaux de M. C. E. Collignon. *Tract.* 8vo. vol. 428. *Paris*, 1886. 8vo.
- KRATSCHMER, F. Die Bekleidung. [*Handbuch der Hygiene*: herausgegeben von T. Weyl. Bd. 1.] *Jena*, 1894. 8vo.
- KRAUSE, F. M. A lecture on the Volcanic Rocks of the Ballaarat District, etc. *Tract.* 8vo. vol. 474. *Ballaarat*, 1882. 8vo.
- Résumé of a lecture on the Physiography and Geological Structure of the locality of Mount Buninyong, etc. *Tract.* 8vo. vol. 481. *Ballaarat*, 1882. 8vo.
- KRAUSE, G. C. A. Der Dünenbau auf den Ostseeküsten Westpreussens. *Berlin*, 1850. 8vo.
- KRAUSS, F. Ueber Wasserröhrenkessel. *Tract.* 4to. vol. 120. [*Vienna*, 1892.] 4to.
- KRAYENHOFF, C. R. T., *Baron*. Proeve van een ontwerp tot scheidung der rivieren de Waal en de Boven-Maas, en het doen afloopen dezer laatste, over hare oude bedding, op het Bergsche Veld. *Nijmegen*, 1823. 4to.
- Proeve van een ontwerp tot sluiting van de rivier den Neder-Rhijn en Leck en het storten van derzelver water op den Ijssel. *Nijmegen*, 1821. 4to.
- Recueil des observations hydrographiques et topographiques faites en Hollande. *La Haye*, 1835. 8vo.
- KREEFT, C. First Russian Railroad from St. Petersburg to Zarscoelo and Pawlowsk . . . Carried into execution by a company of shareholders in Russia, England, and Germany. Translated from the German. *Tract.* 8vo. vol. 79. *Lond.* 1837. 8vo.
- KREFFT, G. Australian Vertebrata, fossil and recent. *Tract.* 8vo. vol. 263. *Sydney*, 1871. 8vo.
- The Mammals of Australia. *Sydney*, 1871. folio.
- The Snakes of Australia. *Sydney*, 1869. 4to.
- KREISS, G. Beschreibung der Schlachtviehmärkte und Schlachthäuser in Paris und London, sowie Bericht über die Schlachtviehausstellung des Smithfield-Clubs, December, 1876. *Tract.* 8vo. vol. 351. *Königsberg*, 1877. 8vo.
- KREMER, P. La meunerie française et les procédés nouveaux appliqués par la meunerie étrangère. *Tract.* 8vo. vol. 334. *Paris*, 1881. 8vo.

- KREPP, F. C. The Sewage Question : being a general review of all systems and methods hitherto employed. . . Also a description of Captain Liernur's System for daily inoffensive removal of faecal solids, fluids, and gases, by pneumatic force, etc.
Lond. 1867. 8vo.
- KREUTER, F. Beitrag zur Ermittlung der Förderkosten beim Erdbau. *Tract. folio. vol. 41.* *Wien*, 1887. folio.
- Elementare Theorie des Erddruckes und Berechnung der Stützmauern. *Tract. 8vo. vol. 290.* *Leipzig*, 1877. 8vo.
- Die Forst- und Landwirthschaft und die damit verbundenen Gewerbe, etc. Abth. 1. *Tract. 8vo. vol. 395.* *Wien*, 1859. 8vo.
- Das neue Tacheometer. *Tract. 8vo. vol. 268.* *Brünn*, 1876. 8vo.
- Das neue Tacheometer aus dem Reichenbach'schen mathematisch-mechanischen Institute T. Ertel und Sohn in München.
Brünn, 1888. 8vo.
- Praktisches Handbuch der Drainage, etc. 2 Auflage. *Tract. 8vo. vol. 392.* *Wien*, 1854. 8vo.
- — 3 Auflage. *Wien*, 1887. 8vo.
- Ueber Eisenbahnen im Gebirge. *Tract. 8vo. vol. 470.* *Salzburg*, 1883. 8vo.
- See RANKINE, W. J. M. Handbuch der Bauingenieurkunst . . . bearbeitet von F. Kreuter. 1880.
- KREUTER, F., and OTTO, J. Templeton's Taschenbuch für praktische Mechaniker. Vierte . . . Auflage. *Brünn*, 1882. 8vo.
- KRIEG, M. Die elektrischen Motoren und ihre Anwendungen in der Industrie und im Gewerbe sowie in Eisen- und Strassenbahnwesen. *Leipzig*, 1890. 8vo.
- Die Erzeugung und Verteilung der Elektrizität in Zentral-Stationen. 2 vols. *Magdeburg*, 1888. 8vo.
- Taschenbuch der Elektrizität. *Leipzig*, 1888. 12mo.
- KROHN, H. A. Notes on the use of Explosives in Coal Mines, etc. *Tract. 8vo. vol. 527.* [*Lond.* 1893.] 8vo.
- KRÖHNKE, H. Handbuch zum Abstecken von Curven auf Eisenbahn und Wegelinien. *Leipzig*, 1873. 12mo.
- KRONAUER, J. H. Die Rigi-Eisenbahn mit Zahnradbetrieb. *Tract. 4to. vol. 110.* *Winterthur*, 1871. 4to.
- KRÖNCKE, —. Allgemeine . . . Wasserbaukunst. 1798, etc. See WIEBEKING, C. F., and KRÖNCKE, —.
- KROOK, G. Theoretisch en practisch molenboek voor ingenieurs aannemers, molenmakers, en verdere bouwkundigen. (Atlas of plates.) 's Gravenhage, 1850. 8vo. and folio.
- KRÜGER, M. Spannungs- und Formänderungs-messungen an dem eisernen Pendelpfeiler-Viaducte über das Oschützthal bei Weida, 1887. See FRÄNKEL, W., and KRÜGER, M.

- KRÜGER, R. Handbuch des gesammten Strassenbaues in Städten.
Jena, 1881. 8vo.
- KRUPP, A., and WILDBERGER, A. The Metallic Alloys : a practical guide for the manufacture of all kinds of alloys. Translated and edited chiefly from the German, with . . . additions by W. T. Brannet.
Lond. 1889. 8vo.
- KRUPP, F. Die Fabrikate sowie verschiedene Fabrikations-Processe der Gussstahl Fabrik. *Tract.* 8vo. vol. 271. Essen, 1862. 8vo.
- Gussstahl-Fabrikate von F. Krupp in Essen (Rhein Preussen), 1858-59. 2 vols. New York, [1858, 59.] obl. folio.
- Rapport relatif aux expériences faites en 1857 sur deux canons-obusiers de 12 en acier fondu, provenant des usines de Mr. Krupp, etc. *Tract.* 4to. vol. 50. Essen, [1857.] 4to.
- Statistical Data of the Cast Steel Manufactory, near Essen. *Tract.* 8vo. vol. 253. Essen, 1873. 8vo.
- KUBY, Dr. Die Brunnenwerke und neuen Trinkwasser-Verhältnisse der Stadt Augsburg. *Tract.* 8vo. vol. 326. Augsburg, 1881. 8vo.
- KÜCHLER, F. N. Manuel de l'éclairage par le gaz d'huiles minérales et des huiles à gaz. Munich, 1879. 4to.
- KÜHL, C. Commission européenne du Danube. Carte du Danube, etc. 1887. See HANSFORD, R., and KÜHL, C.
- KUHLMANN, F. Expériences chimiques et agronomiques. Paris, 1847. 8vo.
- Silicatisation, ou application des silicates alcalins solubles au durcissement des pierres poreuses, des ciments, et des plâtrages . . . suivi de rapports du jury de l'Exposition universelle de 1855. 3^e édition. *Tract.* 8vo. vol. 182. Paris, 1858. 8vo.
- KUHNENFELD, K. von, Baron. The strategical Importance of the Euphrates Valley Railway. *Tract.* 8vo. vol. 260. Lond. 1873. 8vo.
- KÜMMEL, W. Die Aufgaben des Ingenieurs bei plötzlich eintretenden Seuchen. *Tract.* 8vo. vol. 520. Berlin, 1893. 8vo.
- Die Cholera in Hamburg und Altona. *Tract.* 4to. vol. 117. [Münich,] 1892. 4to.
- Die Typhus-Epidemie in Altona, 1891, und das filtrirte Flusswasser. [1891.] folio.
- Versuche und Beobachtungen über die Wirkungen von Sand-filtern. *Tract.* 4to. vol. 115. [Münich,] 1893. 4to.
- Die Wasserkunst in Altona. Hamburg, 1861. 4to.
- KUNHARDT, C. P. Small Yachts : their design and construction. Lond. 1885. folio.
- Steam Yachts and Launches ; their machinery and management. A Review of the steam engine as applied to Yachts ; laws governing yachts in American waters : rules for racing, etc. New York, 1887. 8vo.

- KUNHARDT, W. B. *The Practice of Ore Dressing in Europe.*
New York, 1884. 8vo.
- KUPFFER, A. T. *Recherches expérimentales sur l'élasticité des métaux faites à l'Observatoire physique central de Russie.*
St. Pétersbourg, 1860. 4to.
- KUPFFER, C. *Gedächtnissrede auf T. L. W. von Bischoff, etc.*
Tract. 4to. vol. 113. München, 1884. 4to.
- KURRACHEE. *See* INDIA.—KARACHI.
- KURTZE, F. *The Interoceanic Railroad Road through the Republic of Costa Rica.* Tract. 8vo. vol. 441. New York, 1866. 8vo.
- KÜSTEL, G. *Nevada and California Processes of Silver and Gold Extraction for general use, and especially for the mining public of California and Nevada, with full explanations, etc.*
Lond. 1868. 8vo.
- *Roasting of Gold and Silver Ores and the extraction of their respective metals without quicksilver.* New edition.
San Francisco, 1880. 8vo.
- *A Treatise on Concentration of all kinds of Ores: including the chlorination process for gold bearing sulphurets, etc.*
San Francisco, 1868. 8vo.
- KUTSCHER, E. *Die neue Aufbereitungs-Anstalt bei Clausthal.*
Tract. folio. vol. 29. Berlin, 1873. folio.
- KUTTER, W. R. *A general Formula for the uniform Flow of Water, etc.* 1889. *See* GANGUILLET, E., and KUTTER, W. R.
- *Le nuove formole sul moto dell' acqua nei canali e negli alvei sistemati dei fiumi. Tabelle delle velocità medie. Versione dal tedesco di B. D. Bosco.* Milano, 1873. 8vo.
- *The new Formula for Mean Velocity of discharge of Rivers and Canals.* Translated . . . by L. D. A. Jackson.
Lond. 1876. 8vo.
- KUTTNER, C. G., and NICHOLSON, W. *New and complete Dictionary of the German Language . . . according to the German dictionary of Mr. J. C. Adelung.* 3 vols. Leipzig, 1805–13. 8vo.
- KYLE, J. J. J. *Algunos datos sobre la composicion de las aguas del Rio de la Plata.* Tract. 8vo. vol. 282. Buenos Aires, 1874. 8vo.
- *Analisis comparativos del agua del Rio y de las aguas corrientes.* Tract. 8vo. vol. 282. Buenos Aires, 1874. 8vo.
- *Apuntes analiticos. Sobre una aqua del bajo suelo de Buenos Aires. Sobre un mineral de fierro de Catamarca.* Tract. 8vo. vol. 282. Buenos Aires, 1873. 8vo.
- *El aqua del Rio de la Plata.* Tract. 8vo. vol. 282.
Buenos Aires, 1872. 8vo.
- KYNERSLEY, T. C. S. *Pratt's Law of Highways.* 9th edition.
Lond. 1853. 8vo.

L.

- LABARTHE, P. C. Du chauffage et de la ventilation des habitations privées. *Paris*, 1869. 8vo.
- LA BÉDOYÈRE, E. DE. Dictionnaire . . . d'électricité, etc. See DUMONT, G., LEBLANC, M., and LA BÉDOYÈRE, E. DE.
- LABELYE, C. Abstract of Report relating to the Improvement of the River Wear, and Port of Sunderland, etc. *Tract. 4to. vol. 31. Newcastle*, 1748. 4to.
- A Description of Westminster Bridge: to which are added, an account of the methods made use of in laying the foundations of its piers; and an answer to the chief objections, that have been made thereto. With an appendix, containing several particulars, relating to the said bridge, or to the history of the building thereof; as also its geometrical plans, and the elevation of one of the fronts as it is finished. *Lond.* 1751. 8vo.
(Plates wanting.)
- A short Account of the Methods made use of in laying the foundation of Westminster Bridge; with an answer to the chief objections that have been made thereto. To which are annex'd, the plans, elevations, and sections belonging to a design of a stone bridge, adapted to the stone piers which are to support Westminster-bridge, with an explanation of that design. [Containing original drawings by Gayfere.] (Plates wanting.) *Lond.* 1739. 8vo.
- The Result of a View of the Great Level of the Fens. *Tract. 8vo. vol. 12. Lond.* 1745. 8vo.
- LABOULAYE, C. Encyclopédie technologique. Dictionnaire des arts et manufactures, de l'agriculture, des mines, etc. 2^e édition. 2 vols. *Paris*, [1860 ?] 8vo.
- LABROUSSE, C. Navigation intérieure. Traité du touage sur chaîne noyée: établissement et exploitation, technologie et discussion. *Paris*, 1866. 8vo.
- LABZIN, N. The Metal Industries of Russia. *Tract. 8vo. vol. 525. St. Petersburg*, 1893. 8vo.
- LA CAILLE, N. L. DE. The Elements of Astronomy . . . Translated from the French, etc. *Lond.* 1750. 8vo.
- LACASSAGNE, J., and THIERS, R. Nouveau système d'éclairage électrique. *Tract. 8vo. vol. 290. Paris*, 1857. 8vo.
- LACEPEDE BAY, S. *Australia*. Reports and estimates . . . of a light Railway from Kingston, Lacepede Bay to Naracoorte *Adelaide*, 1871-72. folio
- LACERDA, J. DE. A new Dictionary of the Portuguese and English Languages, etc. 2 vols. *Lisboa*, 1866-71. folio.

- LACERDA, J. DE—*continued*. Portuguese African Territories. Reply to Dr. Livingstone's Accusations and Misrepresentations. *Tract*. 8vo. vol. 148. *Lond.* 1865. 8vo.
- LACHEZ, T. Acoustique et optique des salles de réunions publiques, théâtres et amphithéâtres . . . Suivies d'un projet de salle d'assemblée constituante pour neuf cents membres. *Tract*. 8vo. vol. 168. *Paris*, 1848. 8vo.
- LACON, W. S. The Loss of the *Orion*, the *Amazon*, and the *Birkenhead*. A letter . . . on the management of ships' boats. *Tract*. 8vo. vol. 100. *Lond.* 1852. 8vo.
- LA CONDAMINE, C. M. DE. Journal du voyage fait . . . à l'équateur, servant d'introduction historique à la mesure des trois premiers degrés du méridien. 1751. *See* ACADÉMIE DES SCIENCES.
- Mesure des trois premiers degrés du méridien dans l'hémisphère austral. 1751. *See* ACADÉMIE DES SCIENCES.
- LACRETELLE, S. Sur l'estimation des houillères. *Tract*. 8vo. vol. 196. *Saint-Étienne*, 1870. 8vo.
- LACROIX, E. Carnet de l'ingénieur. Recueil de tables, de formules et de renseignements . . . 14° (42°, 46°) édition. *Paris*, 1869–88. 8vo.
- Études sur l'Exposition de 1867, ou les archives de l'industrie au XIX^e siècle. Description générale, encyclopédique, méthodique et raisonnée de l'état actuel des arts, des sciences, de l'industrie et de l'agriculture, chez toutes les nations. Recueil de travaux techniques, théoriques, pratiques et historiques, par MM. les rédacteurs des Annales du génie civil, avec le collaboration de savants, d'ingénieurs et de professeurs français et étrangers. 8 vols. (Atlases of plates.) *Paris*, 1867–69. 8vo. and 4to.
(Vol. 1 is of the 2nd edition.)
- Études sur l'Exposition de 1878. Annales et archives de l'industrie au XIX^e siècle (2^e partie), etc. 9 vols. (Atlases of plates.) *Paris*, [1878.] 8vo. and folio.
- LACROIX, S. F. Éléments d'algèbre, à l'usage de l'École centrale des Quatre-Nations. 13^{me} édition. *Paris*, 1820. 8vo.
- Traité du calcul différentiel et du calcul intégral. 2^{me} édition . . . augmentée. 3 vols. *Paris*, 1810–19. 4to.
- Traité élémentaire du calcul des probabilités. *Paris*, 1816. 8vo.
- — 3^{me} édition. *Paris*, 1833. 8vo.
- LADAME, J. Chemin de fer de Calais à Milan. Les grands tunnels des Alpes et du Jura. *Paris*, 1889. 8vo.
- LADD, G. E. The Clay, Stone, Lime and Sand industries of St. Louis City and County. [*Geol. Survey of Missouri*. Bulletin No. 3.] *Jefferson City*, 1890. 8vo.
- Notes on the Clays and Building Stones of certain . . . counties tributary to Kansas City. [*Geol. Survey of Missouri*. Bulletin No. 5.] *Jefferson City*, 1891. 8vo.

- LADERCHI, G. *Geometria e meccanica delle arti e mestieri e delle belle arti, etc.* 3 vols. *Bologna*, 1829. 8vo.
- LAFAY, J. *Aide-mémoire d'artillerie navale.* *Paris*, 1850. 8vo.
- LA FAYE,—DE. *Recherches sur la préparation que les Romains donnoient à la chaux dont ils se servoient pour leurs constructions, et sur la composition et l'emploi de leurs mortiers.* *Tract.* 8vo. vol. 149. *Paris*, 1777. 8vo.
- LAFFAN, R. M., Col. *Memoranda on the Fortresses of Ceylon.* *Tract. folio.* vol. 14. [1868?] folio.
- LAFFINEUR, J. *Guide pratique d'hydraulique urbaine et agricole, etc.* *Paris*, 1865. 12mo.
- *Traité de la construction des roues hydrauliques, comprenant tous les systèmes de roues en usage, etc.* *Paris*, [1867.] 12mo.
- LAFFONT, MARC. *Le gaz d'eau au point de vue du combustible, de la force motrice, de l'éclairage et de l'hygiène.* *Paris*, 1889. 8vo.
- LA FOSSE, R. DE. *Mémoire sur le pont construit à Vichy en 1868–70.* *Tract.* 8vo. vol. 258. *Paris*, 1873. 8vo.
- LAGAN, River. *Act for amending . . . several Acts made for the improvement of the Lagan Navigation, etc.* *Lond.* 1814. folio.
- LAGERHJELM, P. *Försök att bestämma valsadt och smidt stång-jerns täthet, jemnhet, etc.* 2 vols. (*Atlas of plates.*) *Stockholm*, 1827. 8vo.
- LAGERHJELM, P., FORSELLES, J. H. AF, and KALLSTENIUS, G. S. *Hydrauliska försök, anställda vid Fahlu Grufva, åren 1811–15, etc.* 2 vols. *Stockholm*, 1818–22. 8vo.
- LA GOURNERIE, J. DE. *Discours sur l'art du trait et la géométrie descriptive.* *Tract.* 8vo. vol. 158. *Paris*, 1855. 8vo.
- *Mémoire sur l'extraction des rochers de la passe d'entrée du port du Croisic.* *Tract.* 8vo. vol. 160. *Paris*, 1848. 8vo.
- *Traité de perspective linéaire, contenant les tracés pour les tableaux, plans et courbes, les bas-reliefs et les décorations théâtrales, avec une théorie des effets de perspective.* (*Atlas of plates.*) *Paris*, 1859. 4to. and folio.
- LAGRANGE, J. L., Count. *Mécanique analytique . . . Nouvelle édition.* 2 vols. *Paris*, 1811–15. 4to.
- *Théorie des fonctions analytiques contenant les principes du calcul différentiel . . . réduits à l'analyse algébrique des quantités finies.* *Tract.* 4to. vol. 18. *Paris*, 1799. 4to.
- — *Nouvelle édition.* *Paris*, 1813. 4to.
- *Traité de la résolution des équations numériques de tous les degrés, avec des notes sur plusieurs points de la théorie des équations algébriques.* 3^{me} édition. *Paris*, 1826. 4to.
- LAGRENÉ, H. DE. *Cours de navigation intérieure. Fleuves & rivières.* 3 vols. *Paris*, 1869–73. 4to.

- LAGRENÉ, H. DE.—*continued*. Navigation de la Seine; Rapport de l'ingénieur en chef pour l'inspection de 1881. *Tract.* 8vo. vol. 376. Paris, 1882. 8vo.
- See REYNAUD, L. Les travaux publics de la France. (Tom. 3. Rivières et canaux. Par H. de Lagrené.) 1883.
- LA GRYE, B. DE. See BOUQUET DE LA GRYE.
- LAHARPE, C. DE. Notes et formules de l'ingénieur et du constructeur-mécanicien. 9^e édition, revue, corrigée et augmentée, par L. A. Barré, C. H. Vigreux et R. P. Bouquet. Paris, 1893. 8vo.
- LA HIRE, P. DE. New elements of Conick Sections; together with a method for their description on a plane. Translated from the French by B. Robinson. 2nd edition. Lond. 1723. 12mo.
- Tables astronomiques. 1740. See ACADEMIE DES SCIENCES.
- LAIDLAW, J. On Centrifugal Action in Practical Work. *Tract.* 8vo. vol. 505. Glasgow, 1891. 8vo.
- LAIRD, J. Letter to the Holders of Bonds in the Birkenhead Docks, and Shareholders in the Birkenhead Dock Company. *Tract.* 8vo. vol. 218. Liverpool, 1851. 8vo.
- LAISSLE, F., and SCHÜBLER, A. Der Bau der Brückenträger mit besonderer Rücksicht auf Eisen-Constructionen. 2 pt. Stuttgart, 1871-76. 8vo.
(Pt. 1 is of the 4th edition.)
- LAKE, J. J. Observations in Science. *Tract.* 8vo. vol. 86. 1843. 8vo.
- LAKE, W. R. An Improved Machine-Tool, chiefly designed for turning Crank-pins of Locomotives. [Specification communicated by . . . T. Urquhart, etc.] *Tract.* 4to. vol. 117. Lond. 1888. 8vo.
- LALANDE, J. DE. Astronomie. 4 vols. Paris, 1781-92. 4to.
(Vols. 1-3 are of the 3rd edition.)
- Des canaux de navigation, et spécialement du Canal de Languedoc. Paris, 1778. folio.
- Tables de logarithmes, étendues à sept décimales, par F. C. Marie. Bruxelles, 1836. 12mo.
- LALANNE, L. Examen critique d'un tableau graphique publié par M. Davaine, pour la détermination des superficies de déblai et de remblai, et des largeurs des profils nécessaires à la rédaction des projets, etc. *Tract.* 8vo. vol. 99. Paris, 1850. 8vo.
- Exposé de deux méthodes pour abrégé les calculs des terrassements et des mouvements de terre dans la rédaction des avant-projets et des projets. *Tract.* 8vo. vol. 304. Paris, 1879. 8vo.
- Mémoire sur les tables graphiques et sur la géométrie anamorphique appliquées à diverses questions qui se rattachent à l'art de l'ingénieur. *Tract.* 8vo. vol. 99. Paris, 1846. 8vo.
- Rédaction des projets; collection de tableaux et de procédés graphiques. *Tract.* folio. vol. 25. Paris, 1879. folio.

- LALL, K., *Rai Bahadur*. Boat Bridge over the River Ravi at Chichawatni, Panjab. *Tract*. 8vo. vol. 462. Lahore, 1879. 8vo.
- Calculations of Strength of Tresses for re-roofing Montgomery Hall. *Tract*. 8vo. vol. 463. [Roorkee, 1877.] 8vo.
- A Collection of Designs for Wooden Bridges, together with rules for calculating the area of waterway, etc. (Atlas of plates.) Roorkee, 1860. 8vo. and folio.
- The Lahore Central Jail. *Tract*. 8vo. vol. 231. [Roorkee, 1868.] 8vo.
- Mayo School of Arts at Lahore. *Tract*. folio. vol. 44. [Roorkee, 1883.] folio.
- Memorandum on the Lawrence and Montgomery Halls. *Tract*. 8vo. vol. 463. [Roorkee, 1877.] 8vo.
- Memorandum on the New Jail at Montgomery. *Tract*. 8vo. vol. 463. [Roorkee, 1875.] 8vo.
- New Telegraph Office for Lahore. *Tract*. 8vo. vol. 468. Lahore, 1881. 8vo.
- Paper on the modes of drawing the different kinds of Arches, and the use of in building. *Tract*. 8vo. vol. 195. Lahore, 1853. 8vo.
- Paper on the modes of setting out the curved portions of Roads and Canals. *Tract*. 8vo. vol. 195. Lahore, 1854. 8vo.
- Poetical Essays in Persian, on moral subjects, entitled 'Goolzar-i-hindee.' 2nd edition. Lahore, 1869. 8vo.
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- Rules for calculating the Velocity and Discharge of Rivers and open Canals. *Tract*. 8vo. vol. 103. Roorkee, 1858. 8vo.
- — 2nd edition. Roorkee, 1866. 8vo.
- Specifications of Works, with a few useful rules, formulæ, and tables. *Tract*. 8vo. vol. 433. Lahore, 1886. 8vo.
- A Treatise on Surveying Instruments and Surveying. *Tract*. 8vo. vol. 385. Roorkee, 1857. 8vo.
- Tree Spurs on the Ravee. *Tract*. 8vo. vol. 231. [Roorkee, 1867.] 8vo.
- Useful Rules and Tables, relating to Measurement of Timber: illustrated with practical examples, etc. Roorkee, 1869. 8vo.
- — 2nd edition, revised, etc. Lahore, 1886. 8vo.
- LALLEMAND, C. Lever des plans et nivellement. 1889. See DURAND-CLAYE, C. L., PELLETAN, A., and LALLEMAND, C.
- LALLEMANT, G. A. La minería en la provincia de Mendoza. El Paramillo de Uspallata, etc. Buenos Aires, 1890. 8vo.
- LAMAIRESSE, P. E. Études hydrologiques sur les monts Jura. Mémoire. Paris, 1873. 4to.

- LAMANDÉ, C. Pont de l'École Militaire, construit sur la Seine Paris, en face du Champ-de-Mars, *etc.* Rouen, 1814.
- Pont en pierre à construire sur la Seine à Rouen. Deux devis des ouvrages, *etc.* Tract. 4to. vol. 72. Paris, 1815.
- LAMB, H. A Treatise on the Mathematical Theory of the Mot Fluids. Cambridge, 1879.
- LAMB, J. Description of a concentric circular Proportione instrument for abridging . . . calculations. Tract. 8vo. vol Lond. 1827.
- LAMB, T., and LLEWELLYN, —. The Scale Field Book. Lond. 1846.
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- LAMBETH BRIDGE CO. Lambeth Bridge Co. versus Metrop Board of Works.
- LAMBETH WATERWORKS. An Act to enable the . . . Pr tors . . . to construct additional Works, and for better supp . . . the Parish of Lambeth . . . with Water. (1848.) Lond. 1850.
- Lambeth Waterworks. New source of supply from the Thames, above Kingston. Tract. 8vo. vol. 109. Lond. 1851.
- Lambeth Waterworks. New works at Seething Wells, D Tract. 8vo. vol. 296. [Lond.] 1852.
- LAMBLARDIE, J. E. DE. Mémoire sur les côtes de la Normandie . . . considérées relativement au galet qui re les ports situés dans cette partie de la Manche. Tract vol. 22. Havre, 1789.
- LAMBORN, R. H. A rudimentary Treatise on the Metallur Copper, *etc.* Lond. 1860.
- A rudimentary Treatise on the Metallurgy of Silver and *etc.* Lond. 1861.
- LAMÉ, G. Cours de physique de l'École Polytechnique. 2^{me} é 3 vols. Paris, 1840.
- Leçons sur la théorie analytique de la chaleur. Paris, 1861.
- Leçons sur la théorie mathématique de l'élasticité des solides. 2^{me} édition. Paris, 1866.
- LAMÉ, G., CLAPEYRON, B. P. E., and FLACHAT, S., and E. politiques et pratiques sur les travaux publics de France. Paris, 1832.

- LAMEZAN, G. F. von. Die theoretisch beste Curve für die Spitze der Geschosse und Schiffe. *Tract.* 8vo. vol. 266.
München, 1867. 8vo.
- LAMING, R. On the Origin of Matter and its mental government, etc. Pt. 1. *Tract.* 8vo. vol. 212. Brighton, 1870. 8vo.
- LAMLASH LIGHTHOUSE. Copy of correspondence respecting suggestions of Sir W. Thomson for the alteration of the character of Lamlash Lighthouse. Lond. 1880. folio.
- LAMM, E. Traction et moteurs à vapeur sans feu. 1882. See FRANCO, L., and LAMM, E.
- LAMM, E., and FRANCO, L. Traction au moyen des locomotives à vapeur sans feu. *Tract.* 8vo. vol. 531. Paris, 1888. 8vo.
- LAMPE, C. J. H. Allgemeine Bemerkungen über die Bewegung des Wassers in Röhren, etc. *Tract.* 8vo. vol. 274.
Danzig, [1872 ?] 8vo.
- LAMPE, E. Die Entwicklung der Mathematik im Zusammenhange mit der Ausbreitung der Kultur, etc. *Tract.* 8vo. vol. 121.
Berlin, 1893. 8vo.
- LAMPRECHT, R. Die Kohlen-Aufbereitung. (Atlas of plates.) Leipzig, 1888. 8vo. and folio.
- LAN, C., MOUSSETTE, —, BERGERON, C., and DUBOCQ, C. Commission d'enquête sur les chemins de fer. Rapports de MM. Lan, Moussette et Bergeron (Mission en Angleterre), et de M. Dubocq (Mission en Allemagne). *Tract.* 4to. vol. 30.
Paris, 1862. 4to.
- LANARK, *County of*. Act for making and maintaining certain Roads and Bridges in the counties of Lanark and Dumbarton. *Tract.* 4to. vol. 4.
Lond. 1820. folio.
- LANCASHIRE AND YORKSHIRE RAILWAY. Report of the Proceedings at the 99th half-yearly meeting of the Shareholders. . . . February 10th, 1886, etc. *Tract.* 8vo. vol. 538.
Manchester, 1886. 8vo.
- Specifications for Railway Carriages and Locomotives.
Manchester, 1878–81. 8vo. and 4to.
- LANCASTER, *County of*. Act for the Improvement of Roads in the County of Lancaster. Lond. 1784–95. folio.
- Lancashire Distress and Emigration to Australia, etc. By an Old Colonist. *Tract.* 8vo. vol. 140. [1863 ?] 8vo.
- Report of the Director of Technical Instruction, J. A. Bennion, for the year ending September, 1892. . . . Presented to the County Council, 3rd August, 1893. Preston, 1893. folio.
- Statistical Illustrations of the past and present state of Lancashire. *Tract.* 8vo. vol. 69. [1840 ?] 8vo.

LANCASTER CANAL. An Act for making a navigable Canal from Kirkby Kendal, Westmoreland, to West Houghton, Lancashire.

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Lond. 1793. folio.

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Lond. 1796. folio.

— An Act for better enabling the Company of Proprietors to complete the same.

Lond. 1800. folio.

— An Act to enable the Company of Proprietors to vary the course of the Canal and to make Railways or Roads, *etc.*

Lond. 1807. folio.

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Lond. 1878. folio.

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Bologna, 1893. folio.

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LAND SECURITIES COMPANY. Summary of the advantages afforded to the Public by the Land Securities Company under "The Mortgage Debenture Act, 1865," and "The Mortgage Debenture Amendment Act, 1870." *Tract. 8vo. vol. 483.*

Lond. 1881. 8vo.

LANDALE, C. Report . . . of a Survey to ascertain whether it is practicable and expedient to construct a Railway between the valley of Strathmore and Dundee. *Tract. 4to. vol. 12.*

Dundee, 1825. 4to.

LANDAUER, J. Blow-Pipe Analysis: authorised English edition, by J. Taylor and W. E. Kay.

Lond. 1879. 8vo.

LANDGRAF, —. The Waterways and Railroads; their cooperation and their reciprocal competition in the Rhine basin. [5th Int. Congr. Int. Nav.]

[*Paris*, 1892.] 8vo.

LANDI, T., and FALCONIERI, C. New Process for laying the Submarine Telegraph Cable. *Tract. 8vo. vol. 119.*

Paris, [1870?] 8vo.

LANDOLT, H. M. F. Dictionnaire polyglotte de termes techniques, militaires, et de marine. 4 pts.

Leide, 1865–68. 8vo.

LANDOLT, H., and BÖRNSTEIN, R. Physikalisch-chemische Tabellen.

Berlin, 1883. 4to.

LANDPORT. An Act for . . . [the construction of] a Wharf and other works at Landport in the Borough of Portsmouth, *etc.*

Lond. 1883. folio.

- LANDRIANI, M. Description d'une machine propre à élever l'eau par la rotation d'une corde verticale. *Genève*, 1782. 8vo.
- LANDRIN, H. C., *Jun.* A Treatise on Steel . . . Translated from the French . . . With an appendix on the Bessemer and the Martin Processes for manufacturing Steel, from the report of Abraham S. Hewitt, etc. *Philadelphia and Lond.*, 1868. 8vo.
- LANDRIN, L. Manuel complet du maître de forges, ou traité théorique et pratique de l'art de travailler le fer. 2 vols. in 1. *Paris*, 1829. 12mo.
- LANE, C. B. Railway Communication in London, and the Thames Embankment. 2nd edition. *Tract.* 8vo. vol. 157. *Lond.* 1861. 8vo.
- LANE, D. The elementary Principles of the Gas-engine. *Tract.* 8vo. vol. 409. *Lond.* 1885. 8vo.
- LANE, E. The Coal and Mineral Resources of Peru, etc. *Tract.* 8vo. vol. 526. *Lond.* 1892. 8vo.
- LANFRANCONI, G. E. Rettung Ungarns vor Ueberschwemmung. *Budapest*, 1882. folio.
- Ueber die Wasserstrassen Mittel-Europas und die Wichtigkeit der Regulirung des Donautromes. [*German and Hung.*] *Pressburg*, 1880. folio.
- Voies de communication par eau de l'Europe centrale et de l'importance de la regularisation de la Danube. *Vienne*, 1881. folio.
- LANG, A. Hints on Houses. *Lond.* 1853. 4to.
- LANG, A. M. See ROBERTSON, W. W. Formulæ and Tables for determining the Scantlings of Beams and Joists of all Timbers . . . Appendix on Indian timber by Col. A. M. Lang. 1889.
- LANG, G. H. Letter to the Right Hon. W. E. Gladstone, M.P., on the importance . . . of Railway Extension, etc. *Tract.* 8vo. vol. 77. *Lond.* 1844. 8vo.
- LANG, J., *Capt.* Report on the River Nuddea, etc. 1851. See INDIA.—NUDDEA, *River*.
- LANG, O. Improvements in Naval Architecture. *Woolwich*, 1847. 8vo.
- LANGDON, W. E. The Application of Electricity to Railway working. *Lond.* 1877. 8vo.
- LANGE, D. A. The Isthmus of Suez Canal Question, viewed in its political bearings. *Lond.* 1859. 8vo.
- Lord Palmerston and the Isthmus of Suez Canal. *Tract.* 8vo. vol. 261. *Lond.* 1857. 8vo.
- LANGE, F. Ueber den Betrieb auf den Canälen in Nord-America. *Tract.* 8vo. vol. 406. *Berlin*, 1885. 8vo.
- LANGEN, E. Description of an improved Method of . . . collecting the Gases given off from Furnaces. *Tract.* 8vo. vol. 139. *Manchester*, 1862. 8vo.

- LANGER, J. Theorie der combinirten Brücken-Systeme Dachstühle. *Tract. 8vo. vol. 278. Prag, 1873.*
- LANGLEY, A. A., and PRINCE, —. Langley and Prince's Improved method of Working and Bolt-Locking Points or Switches by Lever. *Lond. [1891.] f*
(Lithograph.)
- LANGLEY, B. Ancient Masonry both in the theory and practice demonstrating the useful rules of arithmetic, geometry, architecture, etc. 2 vols. *Lond. 1736. f*
- The Builder's Chest-Book ; or, a complete key to the five orders of Architecture . . . Second edition . . . to which is added 100 metrical rules made easy . . . by J. Gadsdon. *Lond. 1739. 1s*
- The Builder's Complete Assistant ; or, a library of arts and sciences, etc. 4th edition. *Lond. [1738.]*
- The Builder's Director . . . a pocket treasury of the Grecian Roman and Gothic Order of Architecture, etc. *Lond. 1763.*
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- A Design for the Bridge at New Palace Yard, Westminster composed of nine arches, etc. *Lond. 1736. 1s*
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- The Measurer's Jewel : exhibiting rules and analogies for mensuration of all kinds of geometrical figures, etc. *Lond. 1742. 1s*
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- LANGLEY, B., and T. Ancient Architecture, restored and improved by a great variety of grand and usefull designs, etc. *[Lond. 1741-42.]*
- The Builder's Jewel ; or, the youth's instructor and workman's remembrancer, etc. . . . 12th edition. *Edinburgh, 1768. 1s*
- LANGLEY, S. P. The internal Work of the Wind. *[Smithsonian Contributions to Knowledge.] Washington, 1893.*
- LANGMAID, J., and GAISFORD, H. Elementary Lessons in Steam Machinery and the Marine Steam Engine ; with a short description of the construction of a battle-ship, etc. *Lond. 1893.*

- LANGSDORF, K. C. von. Ausführliches System der Maschinenkunde, mit speciellen Anwendungen bei mannichfaltigen Gegenständen der Industrie für den Praktiker bearbeitet. 2 vols. (Atlas of plates.) *Heidelberg*, 1826–28. 4to.
- Lehrbuch der Hydraulik mit beständiger Rücksicht auf die Erfahrung. (Appendix.) *Altenburg*, 1794–96. 4to.
- LANGTREE, O. Drawings and Description of Clunes Water-works, Victoria, Australia. *Clunes*, 1875. folio.
- LANGUEDOC CANAL. Histoire du canal de Languedoc redigée . . . par les descendants de P. P. Riquet de Bonrepos. *Paris*, 1805. 8vo.
- LANKESTER, E. Notes for a History of Sanitary Legislation. *Tract*. 8vo. vol. 259. [1860?] 8vo.
- LANKESTER, E., and CAMPBELL, D. Proposed Supply of Water to the town of Maidstone, . . . Kent. Reports on the microscopical and chemical examination of the filtered water of the River Medway, etc. *Tract*. 8vo. vol. 151. *Lond.* 1858. 8vo.
- LANKESTER, E., and REDFERN, P. Reports . . . on the results of microscopical examinations of the organic matters and solid contents of waters supplied from the Thames and other sources ; together with a chemical report on the qualities of various specimens of water from chalk springs near Watford : by T. Clark and J. Smith. *Tract*. 8vo. vol. 124. [*Lond.*] 1852. 8vo.
- LANNION, S. Le Congrès de Vienne. *Tract*. 4to. vol. 100. *Paris*, 1886. 4to.
- LANSDOWNE, Marquis of [HENRY PETTY-FITZMAURICE]. Substance of Speech in the House of Lords, . . . on the Government plan for promoting National Education. 7th edition. *Tract*. 8vo. vol. 69. *Lond.* 1839. 8vo.
- LANZ, —, and BÉTANCOURT, —. Analytical Essay on the Construction of Machines : translated from the French. *Lond.* 1820. 4to.
- LANZA, G. Applied Mechanics. 4th edition, revised, etc. *New York*, 1890. 8vo.
- Strength of Shafting subjected to both Twisting and Bending. *Tract*. 8vo. vol. 437. [1887.] 8vo.
- LAPAGE, R. H. On Compound Locomotives. *Tract*. 8vo. vol. 479. *Lond.* 1889. 8vo.
- LAPLACE, P. S. DE, Marquis. Additions à la "Connaissance des tems," année 1813. *Tract*. 8vo. vol. 49. *Paris*, 1813. 8vo.
- Application du calcul des probabilités aux opérations géodésiques. *Tract*. 8vo. vol. 39. [*Paris*, 1820?] 8vo.
- Développement de la théorie des fluides élastiques, et application de cette théorie à la vitesse du son. *Tract*. 8vo. vol. 49. [*Paris*, 1821.] 8vo.
- Essai philosophique sur les probabilités. 2^{me} édition. *Tract*. 8vo. vol. 191. *Paris*, 1814. 8vo.
- — 3^{me} édition. *Tract*. 8vo. vol. 39. *Paris*, 1816. 8vo.

- LA PLACE, P. S. DE, *Marquis*.—*continued*. Essai philosophique sur les probabilités, précédé d'une notice historique sur le calcul de probabilités. D'après la 5^e édition, . . . augmentée par l'auteur. *Bruzelles*, 1829. 8vo.
- Exposition du système du monde. 4^e édition. *Paris*, 1813. 4to.
- — 6^e édition. 2 vols. *Paris*, 1836. 8vo.
- Mémoire sur la figure de la terre. *Tract.* 4to. vol. 18. [Paris, 1818.] 4to.
- Mémoire sur le flux et le reflux de la mer. *Tract.* 4to. vol. 18. [Paris, 1818.] 4to.
- Précis de l'histoire de l'astronomie. *Tract.* 8vo. vol. 49. *Paris*, 1821. 8vo.
- Sur la diminution de la durée du jour, par le refroidissement de la terre. *Tract.* 8vo. vol. 49. [1821?] 8vo.
- Sur la figure de la terre. *Tract.* 8vo. vol. 39. *Paris*, 1819. 8vo.
- Sur la loi de la pesanteur, en supposant le sphéroïde terrestre homogène et de même densité que la mer. *Tract.* 8vo. vol. 39. [Paris, 1821.] 8vo.
- Sur la longueur du pendule à secondes. *Tract.* 8vo. vol. 39. [Paris, 1820.] 8vo.
- Sur la rotation de la terre, etc. *Tract.* 8vo. vol. 39. [Paris, 1821?] 8vo.
- Sur l'attraction des sphères, et sur la répulsion des fluides élastiques. *Tract.* 8vo. vol. 49. [1821.] 8vo.
- Sur le perfectionnement de la théorie et des tables lunaires. *Tract.* 8vo. vol. 49. [1820.] 8vo.
- Sur les inégalités lunaires dues à l'aplatissement de la terre. *Tract.* 8vo. vol. 49. *Paris*, 1820. 8vo.
- Sur l'inégalité lunaire à longue période, dépendante de la différence des deux hémisphères terrestres. *Tract.* 8vo. vol. 49. [1820.] 8vo.
- Théorie analytique des probabilités. 3^e édition. *Paris*, 1820. 4to.
- A Treatise of Celestial Mechanics. Translated . . . by the Rev. H. H. Harte. 2 vols. *Dublin*, 1822–27. 4to.
- Elementary Illustrations of Celestial Mechanics. Part the first, comprehending the first book . . . Translated from the French, etc. *Lond.* 1821. 8vo.
- LA PLATA. Leyes y decretos sobre venta de terrenos y edificaciones en el paraje designado para la fundacion de la capital "La Plata." *Tract.* 8vo. vol. 476. *Buenos Aires*, 1883. 8vo.
- LA PLUCHE, A. N. DE. Spectacle de la nature . . . Translated by S. Humphreys. 1744–53. See ANONYMOUS.

- LAPPARENT, — DE, *Director of French Dockyards*. An Essay on the Prevention of Decay in Timber for shipbuilding and other purposes . . . Translation, with notes. *Tract*. 8vo. vol. 137. Lond. 1862. 8vo.
- LAPPARENT, A. DE, *Ingénieur des mines*. Carte du Pas-de-Calais, etc. See LAROUSSE, É., POTIER, A., and LAPPARENT, A. DE.
- Rapports sur l'exploration géologique sous-marine du Pas-de-Calais. [1875–77.] See POTIER, A., and LAPPARENT, A. DE.
- Revue de géologie. See PERIODICAL PUBLICATIONS.
- LAPRAIRIE, — DE, et POQUET, —, *Abbé*. Notice historique et descriptive de l'abbaye de Saint-Leger de Soissons. *Tract*. 4to. vol. 84. Soissons and Paris, [1850?] 4to.
- LAPWORTH AND KINGSWOOD CANAL. Case in support of the bill for making a Canal from the Stratford upon Avon Canal, at Lapworth, to the Warwick and Birmingham Canal, at Kingswood. *Tract*. 8vo. vol. 48. [1795.] folio.
- LARBALÉTRIER, A. Manuel pratique du drainage des terres arables. Paris, 1890. 8vo.
- LARDNER, D. A Discourse on the Advantages of Natural Philosophy and Astronomy, as part of a general and professional education. *Tract*. 8vo. vol. 192. Lond. 1829. 8vo.
- The Electric Telegraph. A new edition revised and rewritten by E. B. Bright. Lond. 1867. 8vo.
- The Electric Telegraph popularised. Lond. 1855. 8vo.
- Handbook of Astronomy. 4th edition . . . edited by E. Dunkin. Lond. 1875. 8vo.
- Handbook of Natural Philosophy, Electricity, Magnetism, and Acoustics: edited by G. C. Foster. Lond. 1874. 8vo.
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- Handbook of Natural Philosophy. Mechanics. New edition: edited and . . . enlarged by B. Loewy. Lond. 1877. 8vo.
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- Popular Lectures on the Steam Engine, and an Account of the present state of the Liverpool and Manchester Railway, . . . 4th edition. Lond. 1832. 8vo.
- Railway Economy: a treatise on the new art of transport . . . With an exposition of the practical results of the Railways in the United Kingdom, on the Continent, and in America. Lond. 1850. 8vo.
- Steam-communication with India by the Red Sea; advocated in a letter to . . . Viscount Melbourne. *Tract*. 8vo. vol. 163. Lond. 1837. 8vo.

- LARDNER, D.—*continued*. The Steam Engine explained and illustrated ; including also, a memoir of Watt. 7th edition.
Lond. 1840. 8vo.
- 8th edition. Lond. 1851. 8vo.
- Dampmaskinen . . . Oversat af S. Hjorth.
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- A Treatise on the progressive Improvement and present State of the Manufactures in Metal. 3 vols. [*Lardner's Cabinet Cyclopædia*.]
Lond. 1831–34. 12mo.
- LA RIVE, A. DE. A treatise on Electricity in theory and practice. Translated by C. V. Walker. 3 vols. Lond. 1853–58. 8vo.
- LA RIVE, B. L. DE. Précis historique et statistique des canaux et rivières navigables de la Belgique et d'une partie de la France.
Bruxelles, 1835. 8vo.
- Recherches sur le mode de distribution de l'électricité dynamique dans les corps qui lui servent de conducteurs. *Tract. 4to. vol. 26.*
Genève, 1825. 4to.
- LARK, *River*. Amended Act for the Improvement of the River Lark.
Lond. 1817. folio.
- LARKIN, J. The practical Brass and Iron Founder's Guide . . . To which are added recent improvements in the manufacture of iron, steel by the Bessemer process, &c. 5th edition revised, *etc.*
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- The Rudiments of Linear, Plane, and Solid Geometry.
Lond. 1820. 12mo.
- LARMANJAT, J. Les chemins de fer d'intérêt local à un seul rail. *Tract. 8vo. vol. 300.* Paris, 1868. 8vo.
- Conseil général du département de l'Yonne. Chemins de fer d'intérêt local. *Tract. 8vo. vol. 238.* Paris, 1870. 8vo.
- La vérité sur la construction des chemins de fer. *Tract. 8vo. vol. 238.* Paris, 1870. 8vo.

- LARNE. Report on the circumstances attending an Explosion which occurred at Larne, Feb. 5th, 1885. *Lond.* 1885. folio.
- LA ROCHE, — DE. Atlas et description du canal Royal de Languedoc, etc. *Paris*, 1787. 4to.
- LAROCHE, F. Des ponts maritimes, etc. 1879. See STÖCKLIN, A., and LAROCHE, F.
- Étude sur les principaux ports de commerce de l'Europe septentrionale. 1882. See PLOCQ, A., and LAROCHE, F.
- Étude sur les principaux ports de commerce européen de la Méditerranée. *Paris*, 1885. 4to.
- LA ROCHE, H. VON. Geognostische Umriss der Rheinländer. 1825. See OEYNHAUSEN, C. VON, DECHEN, H. VON, and LA ROCHE, H. VON.
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- LAROUSSE, E., POTIER, A., and LAPPARENT, A. DE. Carte du Pas-de-Calais indiquant les affleurements de la craie entre la France et l'Angleterre d'après les reconnaissances exécutées en 1875 et 1876. [Paris, 1877 ?] folio.
- LARSEN, A. A Dictionary of the Dano-Norwegian and English Languages. 2nd edition, etc. *Copenhagen*, 1888. 8vo.
- LARTIGUE, E., and FOREST, H. Sifflet électro-automoteur pour locomotives. Système Lartigue et Forest. *Tract. folio. vol. 17.* *Paris*, 1873. folio.
- LARTIGUE, E., and TESSE, —. Appareils électro-sémaphoriques pour l'exploitation des chemins de fer à deux voies par sections, ou pour l'exploitation à simple voie. Système Lartigue et Tesse. *Tract. folio. vol. 17.* [Paris, 1873.] folio.
- LA RUE, J. B. DE. Traité de la coupe des pierres, ou méthode facile et abrégée pour se perfectionner en cette science. *Paris*, 1764. folio.
- LA RUE, J. Exploitation et législation des carrières. *Paris*, 1887. 8vo.
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- LASCHOBBER, F., and KESSLITZ, W. Magnetische Beobachtungen an den Küsten der Adria in den Jahren 1889 und 1890, etc. *Tract. 4to. vol. 115.* *Pola*, 1892. 4to.

- LASIUS, G. Der neue Physikbau für das eidgenössische Polytechnikum zu Zürich. 1887. See BLUNTSCHLI, F., and LASIUS, G.
- LASLETT, T. Lectures on Timber. Chatham, 1867. folio.
 — Timber and Timber Trees. Lond. 1875. 8vo.
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 — A Lecture on the Sewage Difficulty: delivered at Maidenhead . . . in reply to the paper of J. D. M. Pearce. Tract. 8vo. vol. 161. Lond. 1867. 8vo.
 — [Lectures on Drainage, Sewerage, Irrigation, Water-supply, and Waterworks, delivered at Chatham in 1866 and 1870.] Chatham, 1867-71. folio.
 — Papers upon the Drainage of the Fens and the Inundations of Marshland. Tract. 8vo. vol. 173. Ely, [1863.] 8vo.
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 — Report on B. Latham's Scheme for disposing of the Sewage of Thames Ditton, Esher, and the western portion of Long Ditton. Tract. folio. vol. 39. Kingston, 1886. folio.

- LATHAM, B.—*continued*. Report on Cawnpore Sewerage. *Tract.* 8vo. vol. 511. Calcutta, 1891. 8vo.
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- Report on the Aberdeen Sewerage, 1886. *Tract.* 8vo. vol. . Lond. 1886. folio.
- A Report on the Drainage of Margate, etc. *Tract.* 8vo. vol. 275. Margate, 1877. 8vo.
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- Report upon the influence of the Sewage Irrigation Works at Beddington on the health of the inhabitants of the neighbourhood. *Tract.* 8vo. vol. 194. Croydon, 1870. 8vo.
- Report upon the Main Drainage of the Metropolis. Lond. 1883. 8vo.
- Résumé du rapport de M. B. Latham sur le drainage du Caire. *Tract.* 8vo. vol. 496. Le Caire, 1890. 8vo.
- Sanitary Engineering; a guide to the construction of works of sewerage and house drainage; with tables, etc. Lond. 1873. 8vo.
- — 2nd edition. Lond. 1878. 8vo.
- Sanitary Engineering; to which is added an Appendix, giving specimen copy of proposals for estimates . . . for the construction of a sewer in New York city; also a paper on planning and building of sewers, etc. Chicago, 1877. folio.
- Sanitation in India. [Lond. 1891.] folio.
- Schedule of Particulars respecting the Waterworks of various Towns and Districts. [Croydon, 1871.] 8vo.
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- LATIMER, H. Fruitful Sermons. *Lond.* 1607. 8vo.
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- LATROBE, B. H. A Letter on the Railway Gauge Question. Also extracts from English engineers' reports to the British Government on railway gauges, published by W. W. Evans. *Tract.* 8vo. vol. 227. *New York*, 1872. 8vo.
- LATZINA, F. V. The Argentine Republic as a field for European Emigration. *Tract.* 4to. vol. 92. *Buenos Aires*, 1883. 4to.
- LAUDER, J., and CAMPBELL, J. Report of a Mineral Survey along the tract of the Union Canal, from the river Aron to Falkirk, and from thence, six miles west, on the Forth and Clyde Canal. *Tract.* 4to. vol. 7. *Edinburgh*, 1814. 4to.
- LAUDERDALE, *Earl of* [JAMES MAITLAND]. Thoughts on Finance, suggested by the measures of the present session. 2nd edition. *Tract.* 4to. vol. 58. *Lond.* 1797. 4to.
- LAUGEL, A. Études scientifiques. *Paris*, 1859. 12mo.
- Revue de géologie. See PERIODICAL PUBLICATIONS.
- LAUGHTON, J. K. Nautical Surveying. 2nd edition. *Lond.* 1882. 8vo.
- LAUNAY, L. DE. Traité des gîtes minéraux, *etc.* 1893. See FUCHS, E., et LAUNAY, L. DE.
- LAUNCESTON, *Tasmania*. Detail drawings of the Launceston and Scottsdale Line [of Railway]. *Hobart*, 1885. folio.
- LAUNCESTON AND WESTERN RAILWAY, *Tasmania*. Expenditure on construction at time of transfer. *Hobart Town*, 1875. folio.
- Report of the Minister of lands and works. *Hobart Town*, 1875. folio.
- Report for 1879 (and 1883). *Hobart Town*, 1880, 84. folio.

- LAUNHARDT, —. Die Steigerungsverhältnisse der Strassen. *Tract.* 8vo. vol. 330. *Hannover*, 1880. 8vo.
- LAUR, F. Les dosages du zinc dans les minerais de zinc. *Tract.* 8vo. vol. 255. *St. Etienne*, 1875. 8vo.
- Géologie et hydrologie de la plaine du Forez. *Tract.* 8vo. vol. 338. *St. Etienne*, 1881. 8vo.
- Mines et usines du bassin de la Loire. *St. Etienne*, 1879. 8vo.
- Les mines et usines en 1889-90. Étude complète sur l'Exposition Universelle de 1889. Pts. 1-4. *Paris*, 1890. 8vo.
- Prolongement du bassin houiller de la Loire. 1. Sondage de la plaine du Forez. *Tract.* 8vo. vol. 309. *St. Etienne*, 1879. 8vo.
- LAURENCE, Z. Perspective Simplified; or, the Principles of the Art, as laid down by Dr. Brook Taylor, etc. *Lond.* 1838. 8vo.
- LAURENT, A. Chemical Method: notation, classification, and nomenclature. Translated by W. Odling. [*Cavendish Society.*] *Lond.* 1854. 8vo.
- LAURENT, C. Guide du sondeur, etc. 1861. See DEGOUSÉE, - and LAURENT, C.
- LAURENT, J. Album du constructeur de chaudières à vapeur. Collection méthodique de 165 types de générateurs . . . Accompagnée d'un recueil de notes par Dunkel. (Atlas of plates.) *Paris*, 1875. 8vo. and folio.
- LAURENT, P. See SIACCI, F. Balistique extérieure: traduction annotée par P. Laurent. 1892.
- LAURIE, J. A Practical Analysis of the comparative merits of one pound and tenpence as the ruling integer of a Decimal Currency for the United Kingdom. *Lond.* 1854. 8vo.
- Tables of Exchange between Paris, Bordeaux, Marseilles, Havre, Lyons, Brussels, Ghent, Bruges, Antwerp, Genoa, and London: being French money reduced into English, and English money reduced into French, from 23 francs to 26½ francs per pound sterling . . . 2nd edition. *Lond.* 1845. 8vo.
- Universal Exchange Tables; showing the value of the coins of every country interchanged with each other. Also discounts, profits, stocks, investments, &c., at every rate per cent. *Lond.* 1852. 8vo.
- LAURIE, R. H. Pilot for the Northern Seas and Mediterranean. (Atlas.) *Lond.* 1839-46. folio.
- LAURIOL, J. Transport électrique de la force. Les expériences de Creil au point de vue pratique. *Tract.* 8vo. vol. 429. *Paris*, 1886. 8vo.
- LAUSANNE. — *Académie de Lausanne.* Faculté technique de l'Académie de Lausanne. Programme de l'enseignement, etc. *Lausanne*, 1870. 8vo.
- Programme des cours, 1888-89. *Lausanne*, 1888. 8vo.

- LAUSANNE AND OUCHY RAILWAY. Exposé des motifs d'un projet de décret concernant la concession d'un chemin de fer pneumatique dès la ville de Lausanne au port d'Ouchy. *Tract. folio. vol. 13.* 1871. folio.
- LAVALLEY, A. Chemin de fer sous-marin entre la France et l'Angleterre. Rapports de M. Lavalley. [Paris, 1875-77.] folio.
- The Channel Tunnel Railway between England and France Report of M. Lavalley on the Geological Explorations made in 1875 and 1876. *Tract. 8vo. vol. 340.* Lond. 1882. 8vo.
- Communication (deuxième, troisième communication) sur les travaux d'exécution du canal maritime de l'isthme de Suez. Paris, 1866-69. 8vo.
- LAVELEYE, A. DE. Histoire des vingt-cinq premières années des chemins de fer belges. Bruxelles, 1862. 8vo.
- Voie entièrement métallique, système à longrines de Serres et Battig. *Tract. 4to. vol. 82.* Bruxelles, 1878. 4to.
- LAVELEYE, E. DE. International Bimetallism and the Battle of the Standard. Lond. 1881. 8vo.
- LAVERTINE, R. A. Map of Stellaland. Cape Town, 1884. 8vo.
- LAVOINNE, E. La Seine maritime et son estuaire. Avec une introduction par C. Lechalas. Paris, [1885.] 8vo.
- LAVOINNE, E., and PONTZEN, E. Les chemins de fer en Amérique. 2 vols. (Atlases of plates.) Paris, 1880. 8vo. and 4to.
- LAW, H. Examples of the modes of setting out Railway Curves, etc. *Tract. 8vo. vol. 257.* Lond. 1846. 8vo.
- Letter to G. Offor, on the scheme for Main Drainage of the districts north of the Thames. *Tract. 8vo. vol. 108.* Lond. 1855. 8vo.
- Mathematical Tables for trigonometrical, astronomical and nautical calculations. New edition. Lond. 1884. 8vo.
- Reports upon the condition of the . . . Thames, etc. 1878. See BAZALGETTE, Sir J. W., LAW, H., and OTHERS.
- The Rudiments of Civil Engineering. Second edition. 2 pts. Lond. 1850. 8vo.
- — New edition. Lond. 1854. 8vo.
- — New edition. Lond. 1862. 8vo.
- The Rudiments of Civil Engineering, including a treatise on Hydraulic Engineering by G. R. Burnell. 6th edition, revised with . . . additions . . . by D. K. Clark. Lond. 1881. 8vo.
- See SIMMS, F. W. A Treatise on the Principles . . . of Leveling . . . With the addition of Mr. Law's Practical Examples for setting out Railway Curves, etc. 1884.

- LAW, H., and CLARK, D. K. The Construction of Roads and Streets. In two parts. i. The Art of Constructing common Roads. By H. Law. ii. Recent Practice in the Construction of Roads and Streets including pavements of stone, wood and asphalt. By D. K. Clark. *Lond.* 1877. 8vo.
- LAW, H., and YOUNG, J. R. Mathematical Tables, to which is prefixed a Treatise on Logarithms, together with a series of tables for Navigation and Nautical Astronomy. *Lond.* 1879. 8vo.
- LAWES, E. The Act for promoting the Public Health ; with notes, an analytical index, and . . . "The Nuisances Removal and Diseases Prevention Act, 1849," etc. *Lond.* 1849. 8vo.
- LAWES, Sir J. B. Experimental Investigation into the amount of Water given off by Plants during their growth. *Tract.* 8vo. vol. 264. *Lond.* 1850. 8vo.
- Memoranda of the plan and results of the Field Experiments conducted on the farm of J. B. Lawes . . . 1876. (1882, etc.) *Tract.* 4to. vol. 79 and folio. vol. 37. *Lond.* 1876, etc. folio and 8vo.
- On the Formation of Fat in the Animal Body. *Tract.* 8vo. vol. 272. *Cambridge,* 1877. 8vo.
- On the Sewage of London, being a paper, etc. *Tract.* 8vo. vol. 140. *Lond.* 1855. 8vo.
- Report on Evergreen and Deciduous Trees. *Tract.* 8vo. vol. 264. *Lond.* 1851. 8vo.
- LAWES, Sir J. B., and GILBERT, Sir J. H. Determination of Nitrogen in the Soils of some of the Experimental Fields at Rothamsted. *Tract.* 8vo. vol. 415. *Lond.* 1883. 8vo.
- Experiments on Ensilage conducted at Rothamsted. Season 1884-85. *Tract.* 8vo. vol. 415. *Lond.* 1886. 8vo.
- On some points in the Composition of Soils, with results illustrating the sources of the fertility of Manitoba Prairie Soils. *Tract.* 8vo. vol. 415. *Lond.* 1885. 8vo.
- On the Composition, value and utilisation of Town Sewage. *Tract.* 8vo. vol. 156. *Lond.* 1866. 8vo.
- On the Valuation of Unexhausted Manures. *Tract.* 8vo. vol. 415. *Lond.* 1886. 8vo.
- Report of Experiments on the Growth of Wheat. *Tract.* 8vo. vol. 415. *Lond.* 1885. 8vo.
- LAWES, Sir J. B., GILBERT, Sir J. H., and WARINGTON, R. New determinations of Ammonia, Chlorine, and Sulphuric Acid in the Rain-Water collected at Rothamsted. *Tract.* 8vo. vol. 415. *Lond.* 1883. 8vo.
- The Nitrogen as nitric acid in the Soils and Subsoils of some of the fields at Rothamsted. *Tract.* 8vo. vol. 415. *Lond.* 1883. 8vo.

- LAWES, Sir J. B., GILBERT, Sir J. H., and WARINGTON, R.—*continued*. On the Amount and Composition of the Rain and Drainage-Waters collected at Rothamsted. With appendix tables. *Lond.* 1882. 8vo.
- LAWFORD, G. M. The Drainage of town Houses, *etc.* *Tract.* 8vo. vol. 520. *Lond.* 1892. 8vo.
- A Paper on Fireproof Floors, *etc.* *Tract.* 8vo. vol. 491. [*Lond.*] 1889. 8vo.
- LAWFORD, W. A Paper on Light Railways, *etc.* *Tract.* 8vo. vol. 487. [*Lond.*] 1888. 8vo.
- Railway Management: a paper, *etc.* *Tract.* 8vo. vol. 256. *Lond.* 1874. 8vo.
- LAWRENCE. Lawrence Waterworks: trial of duty and capacity of the Pumping Engine. *Tract.* 8vo. vol. 326. 1876. 8vo.
- LAWRENCE, E. The Progress of a Century; or, the Age of Iron and Steam. *Lond.* 1886. 8vo.
- LAWRENCE-HAMILTON, J. Report upon the Fish Markets, Fish Trade Abuses, Fish Frauds and Adulterations, and Fish Supply of the Metropolis, *etc.* Second and enlarged edition. *Tract.* 4to. vol. 114. *Lond.* 1890. 4to.
- LAWRIE, J. G. On the Operation of Air Engines. *Tract.* 8vo. vol. 139. *Glasgow,* 1861. 8vo.
(From Min. Proc. Inst. Eng. in Scotland.)
- LAWS, W. G. City of Newcastle-upon-Tyne. Proposed Abattoirs and new site for Cattle Market. Report to the Sanitary Committee, April, 1886. *Tract.* 8vo. vol. 449. *Newcastle-upon-Tyne,* 1886. 8vo.
- LAWS, W. G., and ARMSTRONG, H. E. Report on the Water-Supply of Newcastle-upon-Tyne and district. *Tract.* 8vo. vol. 378. *Newcastle-upon-Tyne,* 1884. 8vo.
- LAWSON, A. C., and POSADA, J. DE LA C. The Geology of Carmelo Bay. *Berkeley,* 1893. 8vo.
- LAWSON, T. Meteorological Register . . . from 1831 to 1842 inclusive: compiled from observations made by the officers of the medical department of the army of the military ports of the United States. *Tract.* 8vo. vol. 246. *Washington,* 1851. 8vo.
- LAWSON, W. N. The Law and Practice under the Patents, Designs, and Trade Marks Acts, 1883 to 1888, with the practice in actions for infringement of patent . . . 2nd edition, enlarged. *Lond.* 1889. 8vo.
- LAXTON, F. W. The Metropolitan Buildings Act, 18 & 19 Vict. Cap. cxxii.; and notes of cases explanatory of its law and practice, *etc.* *Tract.* 8vo. vol. 120. *Lond.* 1855. 8vo.

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- LAYER, C.** Report (1722) from the Committee appointed to examine Christopher Layer and others in relation to the conspiracy [for introducing the Pretender and dethroning His Majesty]. *Lond.* 1803. folio.
- LAYSON, J. F.** The Stephenson and other Railway Pioneers. *Lond.* [1881?] 8vo.
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- LEA, River.** Acts for the Improvement of the Navigation of the River Lee. *Lond.* 1757-1805. folio.
- Description of the scheme . . . for the . . . disposal of the Sewage of the Lee Valley, by Sir J. W. Bazalgette and others. *Tract.* 8vo. vol. 341. *Lond.* 1882. 8vo.
- Lea Conservancy and Hoddesdon Sewage Farm. *Tract.* 8vo. vol. 407. 1886. 8vo.
- The Lea Conservancy Board versus The Mayor, etc. of Hertford and others. *Lond.* 1884. folio.
- Minutes of Evidence on the River Lee Trust Bill. *Lond.* 1850. folio.
- Report from the Select Committee on Rivers Pollution (River Lee). *Lond.* 1886. folio.
- River Lee Navigation, Commercial Road Bridge specification. *Tract.* folio. vol. 43. 1853. folio.
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- Railway Curves. Lond. 1872. 8vo. —
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- Supplementary Report; being a Rejoinder to certain comments of Mr. Wicksteed on the scheme which has been projected. *Tract.* 8vo. vol. 83. Leeds, 1848. 8vo. —
- LÉAUTÉ, H. Théorie générale des transmissions par câbles métalliques. Règles pratiques. Paris, 1882. 4to. —
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- Pumping Machinery. *Tract.* 8vo. vol. 392. Boston, 1884. 8vo. —
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- LEBAS, A. L'obélisque de Luxor. Histoire de sa translation à Paris, description des travaux auxquels il a donné lieu, avec un appendice sur les calculs des appareils d'abattage, . . . détails pris sur les lieux, et relatifs au sol, aux sciences, aux mœurs et aux usages de l'Égypte ancienne et moderne. Suivi d'un extrait de l'ouvrage de Fontana, sur la translation de l'obélisque du Vatican. *Paris*, 1839. 4to.
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- LE BLANC, —. Choix de modèles appliqués à l'enseignement du dessin des machines, avec un texte descriptif, etc. 2 vols. *Paris*, 1844. 4to.
- L'industriel. [A collection of plates illustrating various kinds of engines and machinery.] 2 vols. [1860?] obl. 4to.
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- Ponts fixes en fils ou en chaînes de fer capables de supporter un chemin de fer, avec application du même système aux poutres et aux combles à grande portée. *Tract.* 8vo. vol. 141. *Paris*, 1844. 8vo.
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- LEBRUN, —. Traité des mines. 1805. *See* GUMPERTZ, H., and LEBRUN, —.
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- LECCHI, A. Trattato de' canali navigabili. *Milano*, 1824. 12mo.
- LECHALAS, C. Hydraulique fluviale. *Paris*, 1884. 8vo.
- Service spécial de la Loire, partie maritime; courbes des hauteurs, des vitesses et des débits. *Nantes*, 1860. 4to.
- Transformation de la Basse-Loire. Rapport, etc. 1869. *See* LOIRE, River.
- *See* LAVOINNE, E. La Seine maritime et son estuaire. Avec une introduction par C. Lechalas. [1885.]

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118. [Paris, 1892.] 4to.
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Tract. 8vo. vol. 517. Paris, 1891. 8vo.
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- LE CHATELIER, L., and OTHERS. Guide du mécanicien con-
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- Recherches sur la formation et l'existence des ruisseaux, rivières, et torrens, qui circulent sur le globe terrestre; avec des observations sur les principaux fleuves qui traversent la France, etc. *Paris, 1804. 4to.*
- LEDEBUR, A. Handbuch der Eisenhüttenkunde. *Leipzig, 1884. 8vo.*
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- Das Roheisen mit besonderer Berücksichtigung seiner Verwendung für die Eisengiesserei. *Tract. 8vo. vol. 315.* *Leipzig, 1879. 8vo.*
- Die Verarbeitung der Metalle auf mechanischem Wege. Lehrbuch der mechanisch metallurgischen Technologie. *Braunschweig, 1879. 8vo.*
- Das "Verbrennen" des Eisens und Stahls. *Tract. 8vo. vol. 466.* *Freiberg, 1883. 8vo.*
- Vollständiges Handbuch der Eisengiesserei. (Atlas of plates.) *Weimar, 1883. 8vo. and folio.*
- LEDIEU, A. *Traité élémentaire des appareils à vapeur de navigation à l'usage des constructeurs, etc.* 3 vols. (Atlas of plates.) *Paris, 1862-65. 8vo. and folio.*

- LE DOCTE, H. Exposé général de l'agriculture luxembourgeoise, ou dissertation raisonnée sur les meilleurs moyens de fertiliser les landes des Ardennes, sous le triple point de vue de la création de forêts, d'enclos, de rideaux d'arbres, de prairies et de terres arables, ainsi que sous le rapport de l'irrigation. *Bruxelles*, 1849. 8vo.
- Mémoire sur la chimie et la physiologie végétales et sur l'agriculture. *Bruxelles*, 1849. 8vo.
- LEDOUX, C. Description raisonnée de quelques chemins de fer à voie étroite. *Paris*, 1874. 8vo.
- Étude sur les pertes de charge de l'air comprimé et de la vapeur dans les tuyaux de conduite. *Tract. 8vo. vol. 529.* *Paris*, 1892. 8vo.
- Ice-Making Machines : translated from the French, etc. *New York*, 1879. 8vo.
- L'organisation du travail dans les mines, en particulièrement dans les houillères, etc. *Tract. 8vo. vol. 495.* *Paris*, 1890. 8vo.
- LEE, J. T., and HOEY, D. G. Joint report on the Ventilation Installation in Messrs. Barclay, Bevan, Tritton and Co.'s Bank, Lombard St. *Tract. 4to. vol. 119.* [*Lond. 1891.*] 4to.
- LEE, S. Dictionary of National Biography. See STEPHEN, L., and LEE, S.
- LEE, T. J., U.S. Army. A Collection of Tables and Formulæ useful in surveying, geodesy, and practical astronomy . . . 2nd edition. [*Professional Papers of the Corps of Engineers, U.S. Army, No. 12.*] *Washington*, 1853. 8vo.
- — — 3rd edition. *Washington*, 1873. 8vo.
- LEE, W. Principles of Town Drainage. Report to the General Board of Health on Returns and Papers. (MS.) *Tract. folio. vol. 40.* *Whitehall*, 1854. folio.
- Public Health Act. Letter to the Local Board of Health for . . . Durham, on Mr. Hawksley's scheme for main sewerage. *Tract. 8vo. vol. 133.* *Lond.* 1852. 8vo.
- Report to the General Board of Health on the application of Sewerage Water to Irrigation, etc. 1851. See PARLIAMENTARY PAPERS.—*Sewage and Sewers.*
- Tabular Statement of the present Cost of Water in thirty-two towns, etc. With the prospective cost of water in the same places for thirty years under the Public Health Act, etc. *Tract. 8vo. vol. 100.* *Lond.* 1850. 8vo.
- See PARLIAMENTARY PAPERS.—BURIALS. Report . . . on Interments in Towns visited during 1849 and 1850, etc. 1851.
- LEEDS.—[*Electric Light.*] Report of the Electric Lighting Committee to the Town Council. *Tract. 8vo. vol. 479.* *Leeds*, 1889. 8vo.
- [*Markets.*] Report on Cattle and Fish Markets, Borough of Leeds. *Leeds*, 1882. 4to.

- LEEDS—*continued*. [*Public Library*.] Annual Report, *etc.*
Leeds, 1885, *etc.* 8vo.
- Catalogue. *Tract.* 8vo. vol. 388. *Leeds*, 1878. 8vo.
- [*Sewage*.] Report of the streets and sewage committee on Utilisation of Sewage. *Tract.* 8vo. vol. 194. *Leeds*, 1870. 8vo.
- [*Water Supply*.] An Act for better supplying with Water . . . the town and neighbourhood of Leeds, *etc.* (1847.)
Lond. 1849. folio.
- An Act for enabling the Waterworks Company to provide a better supply of water to the town and neighbourhood of Leeds.
Lond. 1852. folio.
- Report from the Surveying Officers on the Leeds and Thirsk Waterworks Bill. With the minutes of evidence.
Lond. 1847. folio.
- LEEDS AND LIVERPOOL CANAL. Act for making and maintaining a navigable Cut or Canal from Leeds Bridge, in the county of York, to the North Lady's Walk in Liverpoole . . . and from thence to the River Mersey.
Lond. 1770. folio.
- — [Another edition.] *Lond.* 1817. folio.
- Act for altering and varying the powers of an act . . . for making the river Douglas *alias* Asland navigable, from the river Ribble to Wigan . . . and for enabling the . . . proprietors . . . to purchase the said River Navigation . . . and for other purposes.
Lond. 1783. folio.
- Act to enable the . . . proprietors . . . to vary the line of the said Canal Navigation . . . and for other purposes.
Lond. 1790. folio.
- Act to enable the . . . proprietors of the Canal Navigation from Leeds to Liverpool, to complete the said Navigation . . . and for making a navigable branch . . . from the intended new line of the said canal.
Lond. 1794. folio.
- Act to enable the . . . proprietors . . . to make a navigable Cut, and also a collateral branch or railway, from their said Canal at Hennis Bridge near Wigan, to join the Duke of Bridgewater's Canal at Leigh . . . and to amend the several acts relating to the said . . . canal, *etc.*
Lond. 1819. folio.
- A Bill intituled an Act to confirm a Provisional Order made by the Board of Trade . . . containing the Classification of Merchandise Traffic and the Schedule of Maximum Rates, *etc.*
Lond. 1893. folio.
- A Bill [as amended by the Joint Committee of Lords and Commons] to confirm a Provisional Order . . . containing the Classification of Merchandise Traffic, *etc.* *Lond.* 1893. folio.
- LEEDS, L. W. Lectures on Ventilation, *etc.*
New York, 1868. 8vo.
- — 2nd edition. *New York*, 1876. 8vo.

- LEEDS, W. H. Rudimentary Architecture. . . . The orders and their æsthetic principles. 6th edition. With appendix and . . . index. *Lond.* 1867. 8vo.
- LEECHWATER, J. A. Het Haarlemmer-meer-boek. Dertiende druk met aantekeningen van en voorafgegaan door eenige levens-bijzonderheden van den schrijver en een historisch overzicht der plannen tot en der werken over het droogmaken van het Haarlemmer-meer, door Mr. W. J. C. van Hasselt. *Amsterdam*, 1838. 8vo.
- LEES, J. The Laws of the Customs, with the tariff or customs table, *etc.* *Lond.* 1859. 8vo.
- Report on the practicability of making, at St. Helena, a dépôt for repairing leaky vessels, *etc.* *Tract.* 8vo. vol. 125. *St. Helena*, 1860. 8vo.
- LEESON, H. B., and WARINGTON, R. Report [on the salubrity of the use of Coal Gas]. *Tract.* 8vo. vol. 117. [1865?] 8vo.
- LE FANU, W. R. Report to the Directors of the Great Southern and Western railway on the port of Cork as a packet station for communication with America. *Tract.* 8vo. vol. 96. *Dublin*, 1851. 8vo.
- LE FEBVRE, S. Œuvres complètes. 2 vols. *Maestricht*, 1778. 4to.
- LEFELDT, V. Der gegenwärtige Stand der Abfuhr- und Canalisationsfrage in Grossbritannien. *Tract.* 4to. vol. 71. *Berlin*, 1872. 4to.
- LEFÈVRE, J. Dictionnaire d'électricité et de magnétisme, illustré de figures intercalées dans le texte, comprenant les applications aux sciences, *etc.* *Paris*, 1890. 8vo.
- L'électricité à la maison. *Paris*, 1889. 8vo.
- LEFÈVRE, P., and CERBELAUD, G. Les chemins de fer. *Paris*, [1888.] 8vo.
- LEFFEL, J. The Construction of Mill Dams: comprising also the building of race and reservoir embankments, *etc.* *Springfield, Ohio*, 1874. 8vo.
- LEFORT, J. Traité de chimie hydrologique, comprenant des notions générales d'hydrologie, l'analyse chimique qualitative et quantitative des eaux douces et des eaux minérales, un appendice concernant la préparation, *etc.* *Paris*, 1859. 8vo.
- LEFROY, H. M. A System of high pressure combustion of Fuel for mechanical power purposes, *etc.* *Tract.* 8vo. vol. 148. *Freemantle*, 1864. 8vo.
- LEFROY, Sir J. H. Diary of a Magnetic Survey of a portion of the Dominion of Canada, chiefly in the North Western Territories. *Lond.* 1883. 8vo.
- Magnetical and Meteorological Observations at Lake Athabasca and Fort Simpson; and at Fort Confidence, in Great Bear Lake, by Sir John Richardson. *Lond.* 1855. 8vo.

- LEFROY, Sir J. H.—*continued*. Results of Experiments on Armour Plates, 1861–4, 1868. *Tract.* 8vo. vol. 206.
Woolwich, 1869. 8vo.
- See BOXER, E. M. An Answer to a pamphlet . . . by Col. Lefroy, in reply to the author's Remarks on the system proposed by the Royal Commissioners for the defence of the country. 1862.
- LEFROY GOLD FIELD, *Tasmania*. Report on the mineral resources and permanency of the Lefroy Gold Field, Tasmania. [Hobart,] 1882. folio.
- LE GAY, G. Projet de construction d'un tunnel sous-marin pour . . . relia la France à l'Angleterre. 1869. See MARTIN, E., and LE GAY, G.
- LEGENDRE, A. M. Éléments de géométrie, avec des notes. Paris, 1846. 8vo.
- Essai sur la théorie des nombres. 2^e édition. Paris, 1808. 4to.
- — 3^e édition. 2 vols. Paris, 1830. 4to.
- Mémoire sur la détermination des fonctions Y et Z qui satisfont à l'équation $4(x^n - 1) = (x - 1)(Y^2 \pm nZ^2)$, n étant un nombre premier $4i \mp 1$. *Tract.* 4to. vol. 81. [Paris, 1830.] 4to.
- Nouvelles méthodes pour la détermination des orbites des comètes. Paris, 1805–6. 4to.
- Reflexions sur différentes manières de démontrer la théorie des parallèles, ou le théorème sur la somme des trois angles du triangle. *Tract.* 4to. vol. 55. [Paris, 1833.] 4to.
- Traité des fonctions elliptiques et des intégrales eulériennes, avec des tables pour en faciliter le calcul numérique. 3 vols. Paris, 1828. 4to.
- LEGER, A. Canaux d'irrigation de la vallée du Rhône. *Tract.* 8vo. vol. 376. Lyon, 1883. 8vo.
- Constitution moléculaire des corps trempés. *Tract.* 8vo. vol. 368. Lyon, 1877. 8vo.
- Transmission des forces extérieures au travers des corps solides. *Tract.* 8vo. vol. 368. Paris. 8vo.
- Les travaux publics, les mines et la métallurgie aux temps des Romains. *Tract.* 8vo. vol. 391. Paris. 8vo.
- LEGHORN. Delle opere eseguite per l'ingrandimento della città e porto franco di Livorno dall'anno 1835 all'anno 1842. Firenze, 1854. folio.
- LEGLER, G. H. Rapport sur l'étude des conditions d'écoulement du lac Léman. 1874. See PESTALOZZI, and LEGLER, G. H.
- LEGRAND, —. La nouvelle société indo-chinoise fondée par M. le marquis de Croizier et son ouvrage "L'art Khmer." *Tract.* 8vo. vol. 295. Paris, 1878. 8vo.

- LEGROS, E. Dictionnaire . . . français-anglais. 1865, (1869).
See HAMILTON, H., and LEGROS, E.
- LEHIGH UNIVERSITY. Catalogue of . . . the Exhibit of the
Lehigh University, at the World's Columbian Exposition, 1893.
See CHICAGO.—[*Exposition of 1893.*]
- Publications of the Professors, Instructors and Alumni of the
Lehigh University, 1866–1893. *Tract. 8vo. vol. 533.*
[1893.] 8vo.
- Register. 1879, *etc.* 8vo.
- *Engineering Society.* Journal. Vols. 1–4. 4 vols. in 2.
Bethlehem, 1885–89. 8vo.
- LEHIGH VALLEY RAILROAD. Report of the Board of Di-
rectors . . . 1866(–68). *Tract. 8vo. vol. 171.*
Philadelphia, 1866–68. 8vo.
- LEHMANN, C. G. Physiological Chemistry. Translated . . . by
G. E. Day. 3 vols. [*Cavendish Society.*] *Lond.* 1851–54. 8vo.
- LEHMANN, J. G. See SIBORN, W. Instructions for Civil and
Military Surveyors . . . founded upon the system of J. G.
Lehmann. 1822.
- LEICESTER. The Improvement of Leicester: a report by the
Water Supply, Drainage, and Towns Improvement Company.
1845. 8vo.
- [*Free Library.*] Annual Report. 1882, *etc.* 8vo.
- [*Water Supply.*] An Act for better supplying with Water . . .
the Borough of Leicester, *etc.* *Lond.* 1847. folio.
- An Act to Amend “The Leicester Waterworks Act, 1847,” *etc.*
Lond. 1851. folio.
- Reports from the Surveying Officers, and Minutes of Evidence on
the Leicester Waterworks Bill. *Lond.* 1847. folio.
- Report on the Engine and Boiler trials at the Beaumont Leys
Pumping Station, conducted by E. G. Mawbey. *Tract. 4to. vol.*
512. *Leicester*, 1891. 8vo.
- LEICESTER AND SWANNINGTON RAILWAY. A bill to enable
the . . . proprietors . . . to execute additional works and
branches, *etc.* *Lond.* 1833. folio.
- LEICESTER CANAL. Act for making a navigable communication
between the Loughborough Canal and the town of Leicester, *etc.*
Lond. 1791. folio.
- Act for making navigable the rivers Wreak and Eye, from the
junction of the said river Wreak with the intended Navigation
from Loughborough to Leicester . . . to Mill Close Homestead
in the parish of Melton Mowbray, *etc.* *Lond.* 1791. folio.

- LEICESTER CANAL—*continued*. Act for enabling the . . . proprietors . . . to finish . . . their several works, and to discharge the debts contracted in the making thereof; and for amending [the Act of 1791], *etc.* *Lond.* 1797. folio.
- Act for enabling the . . . proprietors of the navigation from the Leicester Navigation to Melton Mowbray . . . to complete their navigation . . . and for amending the act [of 1791], *etc.* *Lond.* 1800. folio.
- LEICESTERSHIRE AND NORTHAMPTONSHIRE UNION CANAL. Act for making and maintaining a Navigation from the town of Leicester to communicate with the river Nen in or near the town of Northampton, *etc.* *Lond.* 1793. folio.
- Act to enable the . . . proprietors . . . to vary the line of the said canal, and to alter and amend the act passed [in 1793] for making . . . the said canal. *Lond.* 1805. folio.
- LEIGH, E. Plan for Conveying Railway Trains across the Straits of Dover, *etc.* *Tract.* 8vo. vol. . *Manchester*, 1870. 8vo.
- The Science of modern Cotton Spinning. 2nd edition. 2 vols. *Manchester*, 1873. folio.
- LEIGH, R. K. Hongkong. Report on the proposed Drainage of the City of Victoria. *Tract.* folio. vol. 43. *Hongkong*, 1888. folio.
- LEIGHTON, T. H. A letter to the Subscribers to the fund of the South Wales Anthracite Association; to which is added, a collection of letters and papers treating of . . . anthracite, *etc.* *Tract.* 8vo. vol. 175. *Llanelly*, 1841. 8vo.
- LEINS, E. F. von. Die Hoflager und Landsitze des württembergischen Regentenhauses. *Stuttgart*, [1889.] 4to.
- LEINSTER AND MUNSTER RAILWAY. Great Leinster and Munster Railway. Prospectus. *Tract.* 8vo. vol. 234. *Lond.* 1836. 8vo.
- LEIPZIG. Die Eröffnung der Leipzig-Dresdner Eisenbahn. Nebst einleitenden Bemerkungen über Eisenbahnen. *Tract.* 8vo. vol. 256. *Leipzig*, 1837. 8vo.
- LEITH. Plan of Leith Harbour and Docks. *Edinburgh*, 1884. 8vo.
- Specification of the mode of constructing the Sea Boundary Wall proposed to be constructed at the Western end of the intended new Naval Establishment at Leith. *Tract.* folio. vol. 49. [*Leith*, 1826?] folio.
- LEITHART, J. Practical Observations on Mineral Veins. *Lond.* 1838. 8vo.
- LEIXÕES. Construção do porto de Leixões. Contrato e condições. [*Port. & Fr.*] *Tract.* 8vo. vol. 524. *Lisboa*, 1884. 8vo.
- LEJEUNE, É. Guide du briquetier, du fabricant de tuiles, carreaux, tuyaux . . . Suivi du guide du chafournier et du plâtrier, *etc.* *Paris*, 1870. 8vo.

- LEJEUNE, É.—*continued*. Guide du chaudronnier, du fabricant de ciments, bétons et mortiers hydrauliques. 2^e édition. Paris, 1886. 8vo.
- LE KEUX, J. Memorials of Cambridge: a series of views of the colleges, halls, and public buildings. With historical and descriptive accounts by T. Wright and the Rev. H. Longueville Jones. 2 vols. Lond. 1847. 8vo.
- LEKVE, T. Den tekniske Undervisning i Frankrige, Belgien og Schweiz. Tract. 8vo. vol. 472. Kristiania, 1881. 8vo.
- LELAND, C. G. A Manual of Wood-Carving. Revised by J. J. Holtzapffel. Lond. 1890. 8vo.
- 3rd edition. Lond. 1894. 8vo.
- LELOUTRE, G. Du degré d'exactitude des données d'observation d'un essai de machine à vapeur. Tract. 8vo. vol. 371. Paris, 1884. 8vo.
- Recherches expérimentales et analytiques sur les machines à vapeur. Tract. 8vo. vol. 242. Gand, 1873-74. 8vo.
- Recherches expérimentales et analytiques sur les machines à vapeur. Détermination de l'eau entraînée par une méthode thermométrique. Tract. 8vo. vol. 354. Nancy, 1883. 8vo.
- Recherches expérimentales sur les machines à vapeur. 1^{re} partie, Machine à vapeur surchauffée de M. Hirn. Mulhouse, 1865. 8vo.
- Les transmissions par courroies, cordes et cables métalliques. Paris, 1884. 8vo.
- Vérification d'une série d'essais sur une machine de Woolf. Tract. 8vo. vol. 371. Paris, 1885. 8vo.
- LEMAIRE, J. De l'acide phénique . . . 2^e édition. Paris, 1865. 12mo.
- LEMOINE, G. Notice sur les crûtes des principales rivières de France, etc. 1877. See BELGRAND, E., and LEMOINE, G.
- Service hydrométrique du bassin de la Seine. Observations sur les cours d'eau et la pluie centralisées, etc. 1873, etc. See BELGRAND, E., and LEMOINE, G.
- LEMON, J. French and English Systems of Sewerage. [Lond. 1891.] folio.
- LENCAUCHEZ, A. Communications de A. Lencauchez. Congrès International des Mines et de la Métallurgie. Séance du 4 et 11 septembre 1889. Saint-Etienne, 1890. 8vo.
- Étude sur les combustibles en général et sur leur emploi au chauffage par les gaz. (Atlas of plates.) Paris, 1878. 8vo. and 4to.
- Mémoire sur l'emploi des combustibles et sur le chauffage à haute température. Tract. 4to. vol. Saint Etienne, 1882. 4to.
- Métallurgie du zinc, etc., 1861. See MUELLER, A., and LENCAUCHEZ, A.

- LENCAUCHEZ, A., and DURANT, L. De la production et l'emploi de la vapeur considérée comme force motrice, principalement dans les locomotives. *Paris*, 1890. 8vo.
 [From the "Mémoires de la Société des Ingénieurs civils," 1890.]
- LENDY, A. F. Description of A. F. Lendy's Patent Topograph. *Tract. 4to. vol. 31. Lond.* 1864. 4to.
- LENDY, C., *Capt.* A practical Course of Military Surveying, including the principles of topographical drawing. New edition. *Lond.* 1869. 4to.
- Treatise on Fortification, *etc.* *Lond.* 1862. 4to.
- LENNOXVILLE.—*University of Bishops College.* Calendar, 1886–87 (to 1889–90.) 1886–89. 8vo.
- LENS, E. Shall the London Cattle-market be Central or Suburban? A dialogue. *Tract. 8vo. vol. 216. Lond.* 1851. 8vo.
- LENTHÉRIC, C. Du Saint Gothard à la mer. Le Rhône : histoire d'un fleuve, *etc.* 2 vols. *Paris*, 1892. 8vo.
- La Grèce et L'Orient en Provence ; Arles—le bas Rhône—Marseille. *Paris*, 1878. 8vo.
- La Provence maritime, ancienne et moderne, *etc.* *Paris*, 1880. 8vo.
- Les villes mortes du golfe du Lyon, *etc.* *Paris*, 1879. 8vo.
- LENTZ, H. Die Balkenbrücken von Schmiedeeisen. *Tract. 4to. vol. 86. Berlin*, 1865. 4to.
- Fluth und Ebbe und die Wirkung des Windes auf den Meerespiegel. *Tract. 8vo. vol. 314. Hamburg*, 1879. 8vo.
- Von der Fluth und Ebbe des Meeres. *Tract. 4to. vol. 79. Hamburg*, 1873. 4to.
- LENTZE, —. Die im Bau begriffenen Brücken über die Weichsel bei Dirschau und über die Nogat bei Marienburg. *Berlin*, 1855. folio.
- LEOBEN.—*Kaiserlich-königliche Bergakademie zu Leoben und Příbram.* Berg- und Hüttenmännisches Jahrbuch. See PERIODICAL PUBLICATIONS.
- LEOMINSTER CANAL. Act for making and maintaining a navigable canal from Kington, in the county of Hereford, by or through Leominster, to join the river Severn near Stourport Bridge, in the county of Worcester. *Lond.* 1791. folio.
- Act to enable the . . . proprietors to finish and complete the same. *Lond.* 1796. folio.
- Act for enabling the . . . proprietors . . . to raise money to discharge their debts . . . and for . . . amending the acts for making the said Canal, *etc.* *Lond.* 1803. folio.
- LEONARD, H. Memorandum on the River Hooghly, *etc.* 1864. See INDIA.—HOOGHLY.
- Report on the River Hooghly, 1865. See INDIA.—HOOGHLY.

- LEPAGE, P. Lois des bâtimens, ou le nouveau Desgodets. Nouvelle édition. 2 vols. *Paris*, 1847. 8vo.
- LE PLAY, F., and DELAIRE, A. La constitution de l'Angleterre. 2 vols. *Tours*, 1875. 8vo.
- LEROUX, —, SOCHET, —, and DUPONY, —. Report addressed to the Minister of Marine on the process of Dr. Boucherie, for the Preservation of Timber. *Tract*. 8vo. vol. 165. *Lond*. 1856. 8vo.
- LE ROY, J. D. Les ruines des plus beaux monuments de la Grèce, considérées du côté de l'histoire et du côté de l'architecture. 2^e édition. 2 vols. *Paris*, 1770. folio.
- LE ROY, P. A succinct account of the attempts of Messrs. Harrison and Le Roy, for finding the longitude at sea, and of the proofs made of their works; to which is prefixed a summary of the Marquis de Courtanvaut's voyage, for the trial of certain instruments for finding the longitude at sea. Done from the French. *Tract*. 4to. vol. 21. *Lond*. 1768. 4to.
- LE ROY DE MÉRICOURT, A. Die Fortschritte der Schiffshygiene. *Tract*. 8vo. vol. 280. *Pola*, 1876. 8vo.
- LESAGE, L. Report on the proposed Enlargement of the Montreal Water Works. *Montreal*, 1873. 8vo.
- LESAGE, P. C. Recueil de divers mémoires, extraits de la Bibliothèque Impériale des ponts et chaussées. 2 vols. *Paris*, 1810. 4to.
- LESBROS, J. A. Expériences hydrauliques sur les lois de l'écoulement de l'eau, etc. 1832. See PONCELET, J. V., and LESBROS, J. A.
- Hydraulique expérimentale à l'usage des ingénieurs, des chefs d'usines, etc. *Paris*, 1850. 4to.
- LESCALLIER, D. Traité pratique du grément des vaisseaux et autres bâtimens de mer. 2 vols. *Paris*, 1791. 4to.
- LESCASSE, J. Étude sur les constructions japonaises et sur les constructions en général au point de vue des tremblements de terre, et description d'un système destiné à donner une grande sécurité aux constructions en maçonnerie. *Tract*. 8vo. vol. 493. *Paris*, [1877.] 8vo.
- (From the "Mémoires de la Société des Ingénieurs civils.")
- LESLEY, J. P. The Iron Manufacturer's Guide to the furnaces, forges, and rolling mills of the United States, etc. *New York*, 1866. 8vo.
- Manual of Coal and its Topography. Illustrated by original drawings, chiefly of facts in the geology of the Appalachian region of the United States of North America. *Philadelphia*, 1856. 12mo.
- LESLIE, A. On Rainfall and Evaporation in its relation to Water-supply. *Tract*. 8vo. vol. 215. *Edinburgh*, 1871. 8vo.

- LESLIE, A.—*continued*. On the larger Water-works of Great Britain. *Tract*. 8vo. vol. 514. *Edinburgh*, 1892. 8vo.
- On the Prevention of the Waste of Water with the assistance of Deacon Meters and other appliances. *Tract*. 8vo. vol. 514. (From Trans. R. Scot. Soc. Arts.) [1892.] 8vo.
- LESLIE, B. Channel Railway, 1880. *Tract*. folio. vol. 31. *Lond.* [1880.] folio.
- LESLIE, JAMES. Description of an Inclined Plane for conveying boats from one level to another on the Monkland canal, at Blackhill, near Glasgow. *Tract*. 8vo. vol. 100. *Edinburgh*, 1852. 8vo.
- Edinburgh and District Waterworks. Reports to the Trustees, etc. 1872. See HAWKSLEY, T., and LESLIE, J.
- Interim Report on the different Schemes which have been proposed for a supply of Water to Edinburgh. *Tract*. 8vo. vol. 306. *Edinburgh*, 1870–73. 8vo.
- Notes in reply to the objections taken to the Lyne Water Scheme and to the proposed additional Glencorse storage for the purpose of keeping the Crawley Pipe always full. *Tract*. 8vo. vol. 306. *Edinburgh*, 1873. 8vo.
- Observations on the Flow of Water through pipes, conduits, and orifices. *Tract*. 8vo. vol. 498. *Lond.* 1855. 8vo. (From Min. Proc. Inst. C.E.)
- Report (Edinburgh Water Supply) 3rd October. *Tract*. 8vo. vol. 1873. 8vo.
- Report on a proposed Asylum Harbour at Crail. *Tract*. 8vo. vol. 75. *Edinburgh*, 1846. 8vo.
- Report . . . on the Manor Water Scheme. *Tract*. 8vo. vol. 306. *Edinburgh*, 1873. 8vo.
- Report to the Edinburgh and District Water Trust on additional Pentland supplies. *Tract*. 8vo. vol. 306. *Edinburgh*, 1871. 8vo.
- Reports on Dundee Harbour. *Tract*. 4to. vol. 90. *Dundee*, 1843. 4to.
- Reports on the . . . Extension of the Harbour of Dundee. 1854. See OWER, C., and LESLIE, J.
- Supplementary Report on the Improvement and prospective Extension of the Harbour of Dundee. *Tract*. 4to. vol. 41. [Edinburgh, 1855.] 4to.
- Reports . . . upon the unexhausted resources of the Glencorse Valley, etc. 1872. See HAWKSLEY, T., and LESLIE, J.
- [Reprint of] Statements, reports, and extracts from statements and reports of Mr. James Leslie and others to the Trustees of the Harbour of Dundee. *Tract*. folio. vol. 37. *Dundee*, [1885?] folio.

- LESLIE, JAMES, and A. South Alloa Dock. Report on a proposed Wet Dock at South Alloa. *Tract.* 8vo. vol. 280. *Edinburgh*, 1872. 8vo.
- Statement submitted as to Moorfoot Works. *Tract.* 8vo. vol. 306. *Edinburgh*, 1879. 8vo.
- LESLIE, JAMES, and CAMERON, W. H. Memorandum as to the expediency of constructing the Denscleugh Reservoir. *Tract.* 8vo. vol. 306. *Edinburgh*, 1876. 8vo.
- LESLIE, JAMES, and SHAW, J. Report to the Associated Heritors of the River Doon, on the Salmon Fishings and Mill-power of that river. Second and concluding section of the report, *etc.* *Tract.* 8vo. vol. 102. *Edinburgh*, 1855. 8vo.
- LESLIE, JOHN. A practical Illustration of the Principles upon which the Poor Law Amendment Act is founded, as exhibited in the administration of the poor-rates in the parish of St. George, Hanover-square, for the year ending Lady-day, 1835. 7th edition. *Tract.* 8vo. vol. 63. *Lond.* 1835. 8vo.
- LESLIE, Sir JOHN. Elements of Geometry, Geometrical Analysis, and Plane Trigonometry. *Edinburgh*, 1809. 8vo.
- — 3rd edition. *Edinburgh*, 1817. 8vo.
- Elements of Natural Philosophy. Vol. 1. *Edinburgh*, 1823. 8vo. (All published.)
- An experimental Inquiry into the Nature and Propagation of Heat. *Lond.* 1804. 8vo.
- Geometrical Analysis, and Geometry of Curve-lines, *etc.* *Edinburgh*, 1821. 8vo.
- Geometry of Curve-lines. *Edinburgh*, 1813. 8vo.
- The Philosophy of Arithmetic . . . With tables for the multiplication of numbers as far as one thousand. 2nd edition. *Edinburgh*, 1820. 8vo.
- Rudiments of Plane Geometry, including geometrical analysis and plane trigonometry, *etc.* *Edinburgh*, 1828. 8vo.
- A short Account of Experiments and Instruments, depending on the relations of air to heat and moisture. *Tract.* 8vo. vol. 45. *Edinburgh*, 1813. 8vo.
- LESQUEREUX, L. The Flora of the Dakota Group. [*U.S. Geol. Survey.* Monograph xvii.] *Washington*, 1891. 4to.
- LESSAR, P. De la construction des chemins de fer en temps de guerre; lignes construites par l'armée russe pendant la campagne de 1877-78. *Paris*, [1879.] 8vo.
- On the War Railways of the Russian Armies, 1877-78. (In Russian.) *St. Petersburg*, 1879. 8vo.
- LESSEPS, F. DE, Viscount. Addresses at the De Lesseps banquet . . . 1880. *Tract.* 8vo. vol. 333. *New York*, 1880. 8vo.
- Conférence à Lyon. (L'isthme de Suez.) *Paris*, 1865. 8vo.

- LESSEPS, F. DE, *Viscount*—*continued*. Correspondence relative to the Isthmus of Suez Canal. *Lond.* 1858. 8vo.
- The History of the Suez Canal. Translated from the French by Sir H. D. Wolff. *Lond.* 1876. 12mo.
- Inquiry into the opinions of the commercial classes of Great Britain on the Suez Ship Canal. *Lond.* 1857. 8vo.
- The Isthmus of Suez Question. . . With appendices. *Tract.* 8vo. vol. 135. *Lond.* 1855. 8vo.
- Lettres, journal et documents pour servir à l'histoire du canal de Suez. 1857, 58. *Paris*, 1875. 8vo.
- New Facts and Figures relative to the Isthmus of Suez Canal. With a Reply to the Edinburgh Review, by M. Barthélemy St. Hilaire. *Lond.* 1856. 8vo.
- Percement de l'isthme de Suez. 1^{re} série. Exposé et documents officiels. Maps. *Paris*, 1855. 8vo.
- — 2^e série. Exposé et documents. *Paris*, 1856. 8vo.
- — 3^e série. Rapport et projet de la commission internationale. Documents. (Atlas of plates.) *Paris*, 1856. 8vo. and 4to.
- — 4^e série. Meetings anglais en faveur du Canal. *Paris*, 1857. 8vo.
- — 5^e série. Rapport de la commission hollandaise sur les conséquences du percement de l'isthme de Suez. *Paris*, 1860. 8vo.
- — 6^e série. Actes constitutifs de la compagnie universelle du canal maritime de Suez, avec cartes et plans. *Paris*, 1866. 8vo.
- The Suez Canal. Letters and documents descriptive of its rise and progress in 1854–56. Translated from the French by N. D'Anvers. *Lond.* 1876. 8vo.
- The Suez Universal Maritime Canal Company. Working. Transit of Ships. Rules for the navigation of the Suez Maritime Canal. *Lond.* 1869. 8vo.
- LESSEPS, F. DE, *Viscount*, and C. A. DE. Lettres de F. de Lesseps et C. A. de Lesseps à MM. Rouvier et Tirard, présidents du Conseil, ministres des finances de la Compagnie universelle du Canal interocéanique de Panama. *Tract.* 4to. vol. 108. *Paris*, 1888. 4to.
- LETHABY, W. R. Leadwork, old and ornamental, and for the most part English. *Lond.* 1893. 8vo.
- LETHEBY, H. On Food. 2nd edition. *Lond.* 1872. 12mo.
- On the Estimation of the Sanitary Condition of Communities and the comparative salubrity of towns. *Tract.* 8vo. vol. 236. *Lond.* 1874. 8vo.
- Report on conditions . . . affecting the Gas Supply in the City of London. 1865. See HAYWOOD, W., and LETHEBY, H.

- LETHEYBY, H.—*continued*. Report on Sewage and Sewer Gases and on the ventilation of Sewers. Appendix. *Tract.* 8vo. vol. 222. Lond. 1858. 8vo.
- Report on . . . the Gas Supply in . . . London. 1865. See HAYWOOD, W., and LETHEYBY, H.
- Report on the Phosphate Sewage Process. *Tract.* folio. vol. 14. Lond. 1871. folio.
- Reports on the results of experiments to ascertain the Consumption of Gas at public lamps, etc. 1862. See HAYWOOD, W., and LETHEYBY, H.
- Report on the Sanitary Condition of the City of London, for the years 1866–67, with a report on the Cholera epidemic of 1866. *Tract.* 8vo. vol. 222. Lond. 1868. 8vo.
- Report on the Sanitary Condition of the City of London for the year 1869–70. *Tract.* 8vo. vol. 259. Lond. 1871. 8vo.
- The Sewage Question : comprising a series of reports. Lond. 1872. 12mo.
- LETHEYBY, H., and BAZALGETTE, Sir J. W. Metropolitan Board of Works. Report on an Inspection of Manure and Chemical Works in the neighbourhood of the Northern and Southern Outfalls. *Tract.* 8vo. vol. 478. Lond. 1865. 8vo.
- LETHEYBY, H., and HAYWOOD, W. Report upon the Results of the Experiment of applying charcoal to the Sewer Ventilators. Lond. 1862. 8vo.
- LETHEYBY, H., ODLING, W., and ABEL, Sir F. A. Metropolis Water Inquiry. 1867. Tables of the general properties of the water supplied by the Metropolitan Water Companies, before and after filtration. *Tract.* folio. vol. 13. Westminster, 1867. folio.
- LETTIS, E. A. The Accident in the Sewer beneath Corporation Square, Belfast, on June 29th, 1889. *Tract.* 8vo. vol. 483. Belfast, 1889. 8vo.
- LETTISOM, W. G. Manual of Mineralogy of Great Britain and Ireland. 1858. See GREG, R. P., and LETTISOM, W. G.
- LEUPOLD, J. Theatrum arithmetico-geometricum, das ist : Schau-Platz der Rechen- und Mess-Kunst, etc. Leipzig, 1727. folio.
- Theatrum machinarum, oder Schau-Platz der Heb-Zeuge, etc. Leipzig, 1725. folio.
- Theatrum machinarum generale. Schau-Platz des Grundes mechanischer Wissenschaften, etc. Leipzig, 1724. folio.
- Theatrum machinarum hydraulicarum, oder Schau-Platz der Wasser-Künste, etc. 2 pts. Leipzig, 1724–25. folio.
- Theatrum machinarum hydrotechnicarum. Schau-Platz der Wasser-Bau-Kunst, etc. Leipzig, 1724. folio.
- — [MS. translation of the same.] [] folio.

- LEUPOLD, J.—*continued*. *Theatrum pontificiale, oder Schau-Platz der Brücken und Brücken-Baues, etc.* *Leipzig*, 1726. folio.
- *Theatrum staticum, das ist : Schau-Platz der Gewicht-Kunst und Waagen, etc.* *Leipzig*, 1726. folio.
- LEUTHNER, F. Bird's-Eye View of the Interoceanic Canal of Nicaragua and Costa Rica. *New York*, []
- LE VAN, W. B. The Steam Engine and the Indicator : their origin and progressive development ; including the most recent examples of steam and gas motors, *etc.* *Philadelphia and Lond.* 1890. 8vo.
- LEVASSEUR, E. La question de la houille. *Tract.* 8vo. vol. 273. *Paris*, 1876. 8vo.
- LEVEL, E. De la construction et de l'exploitation des chemins de fer d'intérêt local. *Études pratiques, etc.* *Paris*, 1870. 8vo.
- LEVEN CANAL. Act (amended Act) for enabling C. Bethell . . . to make and maintain a navigable Canal from the river Hull . . . in the East Riding of the county of York, to Leven Bridge in the said Riding. *Lond.* 1801, 05. folio.
- LEVEN RIVER, *Tasmania*. Report on the river Leven, by C. N. Bell. [Hobart,] 1890. folio.
- LEVER, D. The Young Sea Officer's Sheet Anchor ; or, a key to the leading of rigging, and to practical seamanship. *Leeds*, 1808. 4to.
- LEVER, E. The Railway and the Mine. *Manchester*, 1861. 8vo.
- Year Book ; or, Railway and Mining Almanack, 1860. *Tract.* 8vo. vol. 136. *Manchester*, 1859. 8vo.
- LEVER, J. O. Austria ; her position and prospects. *Tract.* 8vo. vol. 369. *Lond.* 1861. 8vo.
- LEVERICH, G. The Cable Railway on the New York and Brooklyn Bridge. *New York*, 1888. 8vo.
- The Traffic Capacity of the New York and Brooklyn Bridge Railway. *Brooklyn*, 1889. 8vo.
- LE VERRIER, U. Cours de métallurgie professé à l'École des Mines de Saint-Étienne. Métallurgie des métaux autres que le fer. 2 vols. *Paris*, 1883-87. 4to.
- LEVERSAGE, P. A History of Bristol Cathedral, *etc.* *Clifton*, 1853. 8vo.
- LEVEY, G. C. Essay on the Colony of Victoria (Australia). History, geography, climate, government, *etc.* *Tract.* 8vo. vol. 462. *Melbourne*, 1883. 8vo.
- LEVI, L. Copy of the Report on Technical, Industrial and Professional Instruction in Italy and other countries. *Tract.* 8vo. vol. 364. *Lond.* 1867. 8vo.
- On the Metric System of Weights and Measures. *Tract.* 8vo. vol. 202. *Lond.* 1862. 8vo.

- LE VIEIL, P. Art de la peinture sur verre et de la vitrerie. [1780 ?] 4to.
- LÉVY, M. La statique graphique et ses applications aux constructions. 2^e édition. 4 vols. Paris, 1886–88. 8vo.
- LEWES, V. B. Boiler Deposits. *Tract*. 8vo. vol. 529. Charleston, 1891. 8vo.
- LEWIS, J. Digest of the English Census of 1871. Lond. 1873. 8vo.
- LEWIS, J. F., *Major*. Permanent Fortification for English Engineers. Chatham, 1890. 8vo.
- LEWIS, J. H. The quick and easy Method of teaching Book-keeping according to the English, Italian, and Scotch systems of single and double entry, etc. 14th edition. Lond. [1870 ?] 4to.
- LEWIS, WALLER. Report on the laws . . . in force in France for the regulation of Noxious Trades, etc. 1855. See PARLIAMENTARY PAPERS.—*Noxious Trades and Occupations*.
- LEWIS, WILLIAM. Narrow Gauge Railways, Ireland. *Tract*. 8vo. vol. 404. Dublin, 1882. 8vo.
- LEY, W. C. The Laws of the Winds prevailing in Western Europe. Part I. Lond. 1872. 8vo.
- LEYBOURN, W. The Art of Dialling, by a new, easie, and most speedy way. *Tract*. 8vo. vol. 169. Lond. 1675. 8vo.
- The Compleat Surveyor, containing the whole Art of Surveying of Land . . . with divers kinds of Mensurations . . . 4th edition. Lond. 1679. folio.
- LEYBOURN, W., and LEADBETTER, C. The Description and Use of a portable instrument, vulgarly known by the name of Gunter's Quadrant. 3rd edition. Lond. 1731. 8vo.
- LEZÉ, R. Les machines à glace et les applications industrielles du froid. Paris, [1890 ?] 8vo.
- LEHUIER, S. Éléments d'analyse géométrique et d'analyse algébrique, appliquées à la recherche des lieux géométriques. Paris, 1809. 4to.
- LIAGRE, J. B. J. Calcul des probabilités et théorie des erreurs, avec des applications aux sciences d'observation en général, et la géodésie en particulier. Bruxelles, 1852. 8vo.
- LIAIS, E. Hydrographie du haut San-Francisco et du Rio das Velhas ; ou résultats au point de vue hydrographique d'un voyage effectué dans la province de Minas-Geraes. Paris, 1865. folio.
- LIBERT, W. Les causes de l'accident à la passerelle entre la rue Régence et la boulevard Saucy. 1881. See KRAFT, J., and LIBERT, W.
- LIBERTY AND PROPERTY DEFENCE LEAGUE. Annual Report, 1892–93, etc. Lond. [1893, etc.] 8vo.

- LIBERTY AND PROPERTY DEFENCE LEAGUE—*contin.*
 Report of the Proceedings at the First Annual Dinner held .
 July 12th, 1888. *Tract. 8vo. vol. 484. Lond. 1888.* }
- Self-Help v. State-Help. *Tract. 8vo. vol. 354. Lond. 1882.* }
- Socialism at St. Stephen's in 1883. Work done during
 Session by the Parliamentary Committee . . . of the League
Tract. 8vo. vol. 363. Lond. 1884. }
- LIBRARY ASSOCIATION OF THE UNITED KINGDOM
 Transactions and proceedings of the Conference of Librarians .
 1877. Edited by . . . E. B. Nicholson and H. R. Tedder.
Lond. 1878. }
- Transactions and Proceedings. *Lond. 1879, etc.* }
- LIDDEL, C. Exposition of a plan for a Metropolitan Water Supply
 1849. See GORDON, L. D. B., and LIDDEL, C.
- LIDDELL, H. G., and SCOTT, R. A Greek-English Lexicon, based
 the German work of F. Passow. 2nd edition.
Oxford, 1845.
- LIEBER, O. M. The Assayer's Guide ; or, practical directions
 assayers, etc. *Philadelphia, 1869.* }
- LIEBIG, J. von, *Baron*. An Address to the Agriculturalists of Great
 Britain, explaining the principles and use of his artificial manure
Tract. 8vo. vol. 223. Liverpool, 1845. }
- Chemistry in its application to Agriculture and Physiology
 Edited . . . by Dr. L. Playfair. 2nd edition. *Lond. 1842.* }
- Familiar letters on Chemistry. 3rd edition. *Lond. 1851.* }
- Induction und Deduction. *Tract. 8vo. vol. 158.*
München, 1865. }
- LIEBIG, J. von, *Baron*, and KOPP, H. Annual Report of the
 Progress of Chemistry, and the allied sciences, physics, mineralogy
 and geology. Edited by A. W. Hofmann and W. De la Rive.
 4 vols. 1847–50. *Lond. 1849–53.* }
- LIEBIG, J. von, *Baron*, POGGENDORF, J. C., and WÖHLER, F.
 Handwörterbuch der reinen und angewandten Chemie. Zweite
 Auflage. 9 vols. *Braunschweig, 1857–64.* }
- — Supplementband [to vols. 1 and 2 of the 1st edition].
Braunschweig, 1850. }
- LIECKFELD, G. Der Gasmotor und seine Verwendung in der
 Praxis. *Hannover, 1891.* }
- LIÉGE.—*Association des Ingénieurs sortis de l'École de Liège*
 Annuaire. Vols. 1–14. *Liège and Bruxelles, 1851–72.* }
- (Imperfect ; wanting vols. 4, 5, 10, 12.)
- — 2nd series. 6 vols. *Liège, 1874–76.* }
- — 3rd series. See PERIODICAL PUBLICATIONS.—*Revue Universelle
 des Mines*, tomes 1–10 (2nd series).
- — 4th series. 6 vols. *Liège, 1882–87.* }
- — 5th series. *Liège, 1890, etc.* }

- LIÈGE.**—*Association des Ingénieurs sortis de l'École de Liège—continued.*
 Bulletin trimestriel. 1860-64, -68, -71 and -72. [Liège, 1860-72.] 8vo.
 ——— Nouvelle série, tome I. (etc.) Liège, 1877, etc. 8vo.
 ——— Catalogue de la bibliothèque de l'Association . . . par A. Ransy. Liège, 1894. 8vo.
 ——— Mémorial du xxv^e anniversaire de la fondation de l'Association. Liège, 1873. 8vo.
 ——— Recueil des dispositions organiques et réglementaires et des programmes. Liège, 1884. 8vo.
 ——— *Province of.* Rapport sur la situation de l'industrie minérale et minéralurgique . . . pendant les années 1879-1887. Liège, 1880-88. 8vo.
 ——— *Université de Liège.*—École des arts et manufactures et des mines annexée à l'université de Liège. Dispositions organiques et réglementaires. Programmes généraux et programmes détaillés. Bruxelles, 1864. 8vo.
 ——— *Institut Electro-Technique Montefiore.* Buts. Programme. Conditions d'admission. Liège, 1886. 8vo.
 ——— Discours inaugural et rapport de M. le recteur . . . Programme des cours. Liège, 1887. 8vo.
 ——— Programme des cours. Dispositions réglementaires. Liège, 1889. 8vo.
 ——— Recueil des arrêtés, règlements, décisions, programmes, déterminant l'organisation, le régime et le système d'enseignement de l'école préparatoire, de l'école spéciale des mines et de l'école des arts et manufactures. *Tract.* 8vo. vol. 80. Liège, 1839. 8vo.
LIEGEL, G. Erfahrungen über Konstruktion und Betrieb der Gasöfen. *Tract.* 8vo. vol. 425. Stralsund, 1886. 8vo.
 ——— Résultats d'expérience sur la construction et le fonctionnement des fours gaz. *Tract.* 8vo. vol. 479. Stralsund, 1886. 8vo.
LIERNUR, C. T., Capt. Sanitation by the Double Conduit Sewerage System. *Tract.* 8vo. vol. 520. Berlin, 1890. 8vo.
LIGHT, A. L. The Bridge over the St. Lawrence at Quebec. *Tract.* folio. vol. 32. Quebec, 1884. folio.
 ——— Halifax and Quebec Railway. Report upon the surveys, routes and estimates. *Tract.* folio. vol. 23. Lond. 1861. folio.
LIGHTFOOT, T. B. The mechanical Refrigeration of Air and its applications. *Tract.* 8vo. vol. 401. Middlesbrough, 1885. 8vo.
 ——— Preservation of Foods by Cold. *Tract.* 8vo. vol. 336. Brighton, 1881. 8vo.
LIGHTNING ROD CONFERENCE. Report. [Edited by G. J. Symons.] Lond. 1882. 8vo.
LIGNAROLO, M. Manuale del macchinista navale. Milano, 1894. 8vo.

- LILJENCRANTZ, G. A. M. Pier Constructions of recent date. *Tract.* 8vo. vol. 455. [Chicago, 1879.] 8vo.
- LILLE. Compagnie des tramways du département du Nord. Traction mécanique des trains sur les tramways de Lille à Roubaix et Lille à Tourcoing. *Tract.* 8vo. vol. Paris, 1889. 8vo.
- LILLEY, S. Military Despotism ; or, the Inniskilling Dragoon. A tale of Indian life. *Tract.* 8vo. vol. 183. Lond. 1863. 8vo.
- LILLJEQVIST, R. Förslag till direkt järnvägsförbindelse mellan de skandinaviska länderna och den europeiska kontinenten. *Tract.* 8vo. vol. 492. Stockholm, 1889. 8vo.
- LIMA. Circular, minutes of proceedings, and report of committee appointed by a public meeting of British merchants and residents at Lima and Callao, to inquire into the expediency and practicability of establishing a periodical intercourse between Great Britain and the western coast of South America, via Panama. *Tract.* 4to. vol. 38. Lima, 1836. 4to.
- LIMAVADY AND DUNGIVEN RAILWAY. Report by the Board of Trade on the Classification of Merchandise Traffic and schedule of maximum rates, etc. Lond. 1891. folio.
- LIMERICK AND WATERFORD RAILWAY. Description of the Main Line, etc. *Tract.* 8vo. vol. 2. [1850?] 8vo.
- LIMPSFIELD. The Limpsfield and Oxted Water Act, 1888. Lond. 1888. folio.
- LINCOL, —. Essai sur l'administration des entreprises industrielles et commerciales. Paris, [1869.] 12mo.
- LINCOLN, City of. An Act for better supplying with Water the . . . City of Lincoln, etc. Lond. 1846. folio.
- LINCOLN, County of. Act for embanking and draining certain Salt Marshes and Low Lands within . . . the County of Lincoln, etc. Lond. 1793. folio.
- Act for amending and rendering more effectual an Act [of 1793] for embanking and draining certain Salt Marshes, etc. Lond. 1812. folio.
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- LINDA GOLDFIELD, Tasmania. The Linda Goldfield : its Auriferous and other Mineral Deposits : report by G. Thureau. [Hobart,] 1886. folio.

- LINDE, A. DE. The rivers of "Chih-li" and the Floods during the summer, 1890: a report presented to H. E. Li Hung-Chang, Viceroy of Chih-li, etc. *Tract. 8vo. vol. 527.*
Tientsin, 1890. 8vo.
- LINDGREN, W. Contributions to the Mineralogy of the Pacific Coast. 1890. See MELVILLE, W. H., and LINDGREN, W.
- LINDHEIM, W. VON. Strassenbahnen in Belgien, Deutschland, Grossbritannien und Irland, Frankreich, Italien, Oesterreich-Ungarn, den Niederlanden, Niederländisch-Indien, der Schweiz und den verschiedenen Staaten von Amerika. *Wien, 1888. 4to.*
- LINDLEY, J., and MOORE, T. The Treasury of Botany: a popular dictionary of the vegetable kingdom, with which is incorporated a glossary of botanical terms . . . New and revised edition. 2 vols.
Lond. 1889. 8vo.
- LINDLEY, P. New Holidays in Essex. *Lond. [1891?] 8vo.*
- LINDLEY, W. Bericht die Verbesserung des Hammerbrooks betreffend; nebst Grundriss. *Hamburg, 1840-48. 4to.*
- Bericht über die Anlage eines neuen Siel-Systems zur Entwässerung der Stadt Hamburg. *Hamburg, 1843. 4to.*
- Canalisation de Francfort-sur-Mein. *Tract. 4to. vol. 78.*
Francfort, 1876. 4to.
- [Documents relating to the Waterworks of Hamburg. 1846-51.]
See also:—HAMBURG.
- Erläuterungen über die Anlage und den Zustand der Stadt-Wasserkunst. *[Hamburg, 1846.] 4to.*
- See FRANKFORT, on Main. Bau-Amt . . . Bedingungen unter welchen die Entwässerung der Gebäulichkeiten, etc., in die neuen Canäle gestattet wird. [W. Lindley and J. Gordon, Engineers.] 1872.
- LINDLEY, W. H. Beschränkung der Wasservergeudung unter dem System der Districtswassermesser. *Tract. 8vo. vol. 469.*
[München, 1885.] 8vo.
- Beschreibung der Entwässerungs-Anlagen der Stadt Elberfeld. *Tract. 4to. vol. 121.* 1893. 4to.
- Beschreibung der Entwässerungs-Anlagen der Stadt Frankfurt am Main. 1886. 8vo.
- Beschreibung der Frankfurter Hafenanlage.
Frankfurt am Main, 1888. 8vo.
- Beschreibung der Wasserversorgungs-Anlagen der Stadt Frankfurt am Main. 1886. 8vo.
- Entwässerung der Stadt Elberfeld. *Tract. folio. vol. 33.*
Frankfurt am Main, 1882. folio.
- Entwässerung der Stadt Homburg v. d. Höhe. *Tract. folio. vol. 50.* [Frankfurt-am-Main, 1886.] folio.
- Die Klarbeckenanlage für die Sielwasser von Frankfurt am Main. *Tract. 8vo. vol. 372.* Braunschweig, 1884. 8vo.

- LINDLEY, W. H.—*continued*. [Mannheim Entwässerungs-Gebiete zwischen Neckar und Rhein.] *Tract. folio. vol. 47.*
Frankfurt am Main, 1890. folio.
- Die Nutzbarmachung des Fluss-Wassers für Wasserversorgungen.
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Frankfurt am Main, 1888. folio.
- Welche Erfahrungen sind mit den in den letzten Jahren errichteten Klärvorrichtungen städtischer Abwässer gemacht worden? *etc.*
Tract. 8vo. vol. 483. *Braunschweig*, 1889. 8vo.
- LINDNER, A. Referat über das System Wetli. *Tract. folio. vol. 31.*
(Lithographed.) 1877. folio.
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- Shanbogh District, County of Kilkenny. Report . . . on the Drainage of the Lands in the above District. *Dublin*, 1847. 8vo.
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Washington, 1883. 4to.
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Lond. 1819. 8vo.
- — 2nd edition. *Tract. 8vo. vol. 22.* *Lond.* 1827. 8vo.
- LINGUET, S. N. H. Canaux navigables, ou développement des avantages qui résulteraient de l'exécution de plusieurs projets en ce genre pour la Picardie, l'Artois . . . & toute la France en général.
Amsterdam, 1769. 12mo.

- LINKENBACH, C. Die Aufbereitung der Erze. Handbuch für ausübende und angehende Berg-Ingenieure. *Berlin*, 1887. 4to.
- LINPERCH, P. Architectura mechanica of moole-boek van eenige opstellen van moolens, nevens hare gronden getekent. *Amsterdam*, 1727. folio.
- LINTERN, W. The Mineral Surveyor and Valuer's complete Guide; with traverse tables. *Lond.* 1877. 8vo.
- LILOUVILLE, J. Journal de Mathématiques. 1856-74. See PERIODICAL PUBLICATIONS.
- LIPOWITZ, A. See REID, H. A practical Treatise on the manufacture of Portland Cement; to which is added a translation of A. Lipowitz' work describing a new method, etc. 1868.
- LIPPMANN, G. Cours de thermodynamique professé à la Sorbonne. Rédigé par MM. E. Mathias et A. Renault et précédé d'une préface de l'auteur. *Paris*, 1889. 8vo.
- LISBOA, A. Melhoramento do porto de Pernambuco. 1887. See FOURNIÉ, V., and LISBOA, A.
- Memoria descriptiva e justificativa do projecto de melhoramento do porto do Recife, etc. *Pernambuco*, 1887. 8vo.
- LISBON. Amélioration du port de Lisbonne. [Official Report.] *Lisbon*, 1884. 4to.
- Annaes do Observatorio do Infante Don Luiz, 1882, 87. Vol. 20, 25. *Lisboa*, 1884, 90. folio.
- Conditions of a provincial contract to supply water to the city of Lisbon, made in virtue of an authorization granted to the Portuguese government by the act of both legislative chambers, July 20th, 1855. *Tract.* 8vo. vol. 110. *Lond.* 1855. 8vo.
- Observacoes dos postos meteorologicos. *Lisboa*, 1881- . folio.
- LISTOWEL AND BALLYBUNION RAILWAY. Report by the Board of Trade on the Classification of Merchandise Traffic and schedule of maximum rates. *Lond.* 1891. folio.
- LITTLE, G. Compendium of the improvements effected in Electric Telegraphs by Messrs. Brett and Little, etc. 1847. See BRETT, A., and LITTLE, G.
- LITTLE, G. H. Some Remarks on the Building and Working of Ships and Steamers. [*Papers of the Shipmasters' Soc.* No. 25.] *Lond.* 1893. 8vo.
- LITTLE, J. J. Report on the American System of Dry Docks. *Tract.* 8vo. vol. 359. *New York*, 1882. 8vo.
- LITTLETON, Hon. A. C. Vocabulary of Sea Words in English, French, German, Spanish and Italian. *Portsmouth*, 1879. 8vo.
- LITTRÉ, E. Dictionnaire de la langue française. 2 vols. *Paris*, 1863-69. 4to.
- — Supplément. *Paris*, 1881. 4to.

- LIVEING, G. D. Chemical Equilibrium the result of the Dissipation of Energy. *Cambridge*, 1885. 8vo.
- LIVERPOOL. A general and descriptive history of the ancient and present state of the town of Liverpool. *Liverpool*, 1795. 8vo.
- Visit of American Engineers to the United Kingdom. Reception by the Mayor of Liverpool . . . Programme of arrangements. *Tract*. 8vo. vol. 489. *Liverpool*, 1889. 8vo.
- [*Compass Committee*.] Reports. *Lond.* 1857–61. folio.
- [*Electric Lighting*.] Electric Light. Report by G. F. Deacon. *Tract*. 8vo. vol. 290. *Liverpool*, 1878. 8vo.
- Report of the City Engineer. *Tract*. 8vo. vol. 515. *Liverpool*, 1892. 8vo.
- [*Harbour and Docks*.] Copies of Report and Survey of the Harbours of Liverpool, Holyhead, and Port Dynllaen, etc. *Lond.* 1837. folio.
- Extracts of clauses from the Dock Acts ; and also Bye-laws for the Government of the Docks, with additions and amendments, made at a Common Council, held the 1st of June, 1785. *Liverpool*, 1785. broadside.
- The Liverpool and Birkenhead Dock Granaries. *Tract*. 8vo. vol. 305. (Reprinted from *The Miller*.) [1890?] 8vo.
- Liverpool and Birkenhead Docks. The dock engineer's report. *Liverpool*, 1862–89. 4to.
- Mersey Docks and Harbour Board. Liverpool and Birkenhead Corn Warehouses. *Tract*. 8vo. vol. 494. [1890?] 8vo.
- Port of Liverpool. Trials as to Encroachment. 1826–27. *Liverpool*, 1826. folio.
- Report of the Liverpool Marine Committee as to the deposit of the Dock Dredgings. *Tract*. 8vo. vol. 265. *Liverpool*, 1874. 8vo.
- [*Imperial Jubilee Exhibition*.] Prospectus, regulations, and classification of Exhibits. *Tract*. folio. vol. 40. *Liverpool*, 1887. folio.
- [*Literary and Philosophical Society*.] Proceedings. Vol. I., etc. *Liverpool*, 1845, etc. 8vo. (Vol. 5 wanting.)
- [*Public Library*.] Annual report of the Committee of the Free Public Library, Museum and Walker Art Gallery. *Liverpool*, 1876, etc. 8vo.
- Catalogue. 3 pts. *Liverpool*, 1872–92. 4to.
- [*Tramways*.] Report of the special committee on Tramways appointed by the Council, May, 1873. *Tract*. 8vo. vol. 234. *Liverpool*, 1874. 8vo.
- Tramways ; reconstruction of the inner circle, report of the borough engineer (G. F. Deacon), etc. *Tract*. 8vo. vol. 319. *Liverpool*, 1876. 8vo.

LIVERPOOL—*continued.* [*University College.*] See UNIVERSITY COLLEGE, *Liverpool.*

- [*Water Supply.*] An Act for better supplying . . . Liverpool with Water, from certain Springs in the Township of Bootle, *etc.* *Lond.* 1799. folio.
- An Act to amend the Provisions of two . . . Acts . . . for supplying with Water the Town of Liverpool, and Harrington and Toxteth Park. *Lond.* 1846. folio.
- An Act for better supplying with Water the Borough of Liverpool . . . and for authorising the Mayor, Aldermen, and Burgesses . . . to purchase the Liverpool and Harrington Waterworks and Liverpool Waterworks. (1847.) *Lond.* 1849. folio.
- An Act to extend the time limited by the Liverpool Corporation Waterworks Act, 1847, for purchasing Lands and constructing the Works authorised by that Act, *etc.* *Lond.* 1850. folio.
- An Act for further amending the Local and Personal Acts, 9 & 10 Vict. cap. cxxvii. and 10 & 11 Vict. cap. cclxi., relating to the Liverpool Corporation Waterworks, *etc.* *Lond.* 1852. folio.
- Borough of Liverpool. Report by G. F. Deacon as to prevention of waste of water, restoration of constant service, and waste water meters. *Tract.* 8vo. vol. 249. *Liverpool*, 1873. 8vo.
- City of Liverpool. (Additional water-supply.) Report by G. F. Deacon as to the Vyrnwy masonry dam. *Liverpool*, 1885. 8vo.
[Continued as :]
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[Continued as :]
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- Minutes of proceedings before the Committee on the Liverpool Watering Bill. *Tract.* 8vo. vol. 215. *Lond.* 1843. 8vo.
- Proposal for the better supplying the town and shipping of Liverpool with fresh Water from the springs of Bootle and Childe-wall. *Tract.* 8vo. vol. 94. [1780 ?] 8vo.
- Report from the Surveying Officers, and Minutes of Evidence on the Liverpool Corporation Waterworks Bill. *Lond.* 1847. folio.
- Report of evidence on the alleged dearth and insufficiency of the Water Supply of Liverpool. *Tract.* 8vo. vol. 215. *Liverpool*, 1845. 8vo.
- Special Report from the Select Committee on the Liverpool Corporation Water Bill, together with the Proceedings of the Committee and Minutes of Evidence. *Lond.* 1880. folio.

- LIVERPOOL AND BIRKENHEAD SUBWAY.** Bill and Speech of Sir E. Beckett. *Lond.* 1880. folio.
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- 2nd edition. *Tract.* 8vo. vol. 6. *Lond.* 1766. 8vo.
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- LIVERPOOL ENGINEERING SOCIETY.** Transactions. Vol. 1 (2, *etc.*). *Liverpool,* 1881, *etc.* 8vo.
- LIVERPOOL GEOLOGICAL SOCIETY.** Proceedings. *Liverpool,* 1859–79. 8vo.
- LIVERPOOL MECHANICS' INSTITUTION.** Reports of the directors—Sept. 11, 1833; March 4, 1835; March 13, 1839; and March 11, 1840. *Tract.* 8vo. vol. 167. *Liverpool,* 1833–40. 8vo.
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- Transactions. *Liverpool,* 1841–56. 8vo.
- Journal, 1865, *etc.* *Liverpool,* 1868, *etc.* 8vo.

(Incomplete between 1873 and 1887.)

- LIVERSIDGE, A. *The Minerals of New South Wales, etc.*
Lond. 1888. 8vo.
- President's Address delivered to the Royal Society of New South
 Wales 5th May, 1886. *Tract.* 8vo. vol. 420.
Sydney, 1886. 8vo.
- LIVESEY, J. *Examples of Iron Permanent Way, for main lines,
 light railways and street tramways.* *Westminster*, 1875. 4to.
- LIVIVS, B., *Capt.* A Letter addressed to canal proprietors on the
 practicability of employing Steam Power on Canals. *Tract.* 8vo.
Lond. 1842. 8vo.
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 1876, to authorise the abandonment of certain Waterworks and
 the construction of other Waterworks, *etc.* *Lond.* 1879. folio.
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Lond. 1888. folio.
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 Colliery Explosion. Report by H. D. Greene.
Lond. 1890. folio.
- LLAURADÓ, A. DE. *Projet de loi de secours aux entreprises de
 canaux et réservoirs d'irrigation.* *Tract.* 8vo. vol. 514.
Madrid, 1889. 8vo.
- Reservoirs in Spain. [5th Int. Congr. Int. Nav.]
[Paris, 1892.] 8vo.
- LLEWELLIN, W. Report on the Exmoor Mineral Property,
 addressed to F. W. Knight, M.P. *Tract.* 8vo. vol. 101.
Lond. 1855. 8vo.
- LLEWELYN. The Scale Field Book 1846. See LAMB, T., and
 LLEWELYN, —.
- LLOYD, E. M., *Lieut.* View sketches of ground adjacent to a Fortress.
Tract. 8vo. vol. 243. *Dover*, 1864. 8vo.
- LLOYD, E. W., and HADCOCK, A. G. *Artillery: its progress and
 present position, etc.* *Portsmouth*, 1893. 8vo.
- LLOYD, H. *Elementary Treatise on the Wave Theory of Light.*
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- Account of the Induction Inclinator, and of its adjustments.
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- Two introductory Lectures on Physical and Mechanical Science.
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- LLOYD, J. *The Rates Levied in the Metropolis during the year
 ended March 1883.* *Tract.* 4to. vol. 92. *Lond.* 1884. 4to.
- LLOYD, J. A., *Lieut.-Col.* *Mines of Cerro de Pasco.* *Tract.* folio.
 vol. 10. [*Lond.* 1853.] folio.

- LLOYD, J. A., *Lieut.-Col.—continued*. Mines of Copiapo. *Tract. folio.*
vol. 10. [Lond. 1852.] folio.
- On the Facilities for a Ship Canal Communication between the Atlantic and Pacific Oceans, through the Isthmus of Panama. With an abstract of the Discussion upon the Paper. *Tract. 8vo.*
vol. 441. (From Min. Proc. Inst. C.E., Vol. ix.) Lond. 1850. 8vo.
- Papers relating to proposals for establishing Colleges of Arts and Manufactures for the better instruction of the industrial classes. *Tract. 8vo. vol. 99.* Lond. 1851. 8vo.
- LLOYD, S. A National Canal between the four Rivers a National Necessity. Lond. 1888. 8vo.
- — 2nd edition, enlarged. (Canal Improvements between the four Rivers: a national Necessity.) Lond. 1889. 8vo.
- LLOYD, W. Caminho de ferro de D. Isabel. Da Provincia do Paraná á de Matto-Grosso . . . Relatorio. Rio de Janeiro, 1875. 4to.
- LLOYD'S. An Act to amend Lloyd's Act, 1871. Lond. 1888. folio.
- LLOYD'S REGISTER. Annals of Lloyd's Register, etc. Lond. 1884. 8vo.
- Correspondence with the Board of Trade respecting the Society's proving-house for chain and anchors. *Tract. 8vo. vol. 292.* Lond. 1866. 8vo.
- Extended Report on Steel for Shipbuilding. *Tract. folio. vol. 28.* Lond. 1877. folio.
- Register, 1848-49 (1880-81, 1883-84, and 1887-88). Lond. 1848-87. 4to.
- LOBLEY, J. L. Mount Vesuvius: a descriptive, historical, and geological account of the Volcano, with a notice of the recent eruption, and an appendix, containing Letters by Pliny the Younger, etc. *Tract. 8vo. vol. 474.* Lond. 1868. 8vo.
- LOBNITZ and Co. On the Removal of Rocks, Subaqueous and Dry-land, by a new method, with economy, rapidity, and safety. *Tract. 4to. vol. 108.* Renfrew, 1888. 4to.
- LOCAL GOVERNMENT BOARD. The Reply to the Land Owners' Deputation, 2nd January, 1880. Lower Thames Valley Main Sewerage. MSS. Lond. 1880. folio.
- See also:—PARLIAMENTARY PAPERS.—*Public Health.*
- LOCK, A. G. Gold, its Occurrence and Extraction; with a glossary of English and foreign . . . terms. Lond. 1882. 8vo.
- LOCK, C. G. W. Miners' Pocket-book: a reference-book for miners, mine surveyors, geologists, mineralogists, etc. Lond. 1892. 8vo.
- Mining and Ore-dressing Machinery: a comprehensive treatise dealing with the modern practice of winning both metalliferous and non-metalliferous minerals, etc. Lond. 1890. 4to.

- LOCK, C. G. W.—*continued*. Practical Gold-Mining : a comprehensive treatise on the origin and occurrence of gold-bearing gravels, rocks, and ores, *etc.* Lond. 1889. 8vo.
- LOCK, C. G. W., NEWLANDS, B. E. R., and NEWLANDS, J. A. R. Sugar : a handbook for planters and refiners . . . With . . . a chapter on the distillation of Rum. Lond. 1888. 8vo.
- LOCK, C. G. W., WIGNER, G. W., and HARLAND, R. H. Sugar Growing and Refining. Lond. 1882. 8vo.
- LOCKE, A. W. Report on Grade Crossings, in Worcester, *etc.* 1892. See ALLEN, C. A., LOCKE, A. W., and ELLIS, J. W.
- LOCKE, A. W., WEBBER, W. O., and KIMBALL, G. A. Report of an Investigation into . . . the gradual Abolition of the Crossing of Highways by Railroads at Grade, *etc.* Boston, 1889. 8vo.
- LOCKE, J. Observations on the comparative merits of Locomotive and Fixed Engines, *etc.* 1830. See STEPHENSON, R., and LOCKE, J.
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- LOCKWOOD, C. Dictionary of Terms used in the practice of Mechanical Engineering embracing those current in the Drawing-office, Pattern Shop, Foundry, Fitting, Turning, Smiths' and Boiler Shops. Edited by a Foreman Pattern-maker. Lond. 1888. 8vo.
- Lockwood's Builder's and Contractor's Price Book for 1888, (1890, *etc.*) Edited by F. T. W. Miller. Lond. 1888, *etc.* 8vo.
- LOCKWOOD, T. D. Electrical Measurement and the Galvanometer : its construction and uses. New York, 1883. 8vo.
- Electricity, Magnetism, and Electric Telegraphy. New York, 1883. 8vo.
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- LODI, F. Manuale pratico di geometria ad uso degl' industriali, *etc.* Milano, 1854. 8vo.

- LOFTIE, W. J. Illustrated Guide of the Orient Line of Steamers between England and Australia, etc. [Edited by W. J. Loftie.] Lond. [1884.] obl. 4to.
- — — Fourth edition. Lond. 1890. 8vo.
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- I porti italiani. Tract. 8vo. vol. 524. Milano, 1890. 8vo.
- LOGIER, J. B. A Refutation of the fallacies and misrepresentations contained in a pamphlet entitled "An Exposition of the new system of Musical Education," published by a committee of professors in London. Tract. 8vo. vol. 26. Lond. 1810. 8vo.
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- — — [Another edition.] Tract. 8vo. vol. 210. Lond. 1869. 8vo.
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- (From the Transactions of the Royal Scottish Society of Arts.)
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— Report from the Select Committee on Metropolitan Bridges, etc. *Lond.* 1854. folio.

— Report from the Select Committee on Metropolis Toll Bridges Bills. Minutes of Evidence and Speeches and Act. *Lond.* 1877. folio.

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— Returns relating to the Metropolitan Burials Act. 2 pts. *Lond.* 1852. 8vo.

CHOLERA.

— Report on the last two Cholera epidemics of London as affected by the consumption of impure Water. By J. Simon. (*Gen. Board of Health*.) *Lond.* 1856. 8vo.

COAL.

— Act (and amended Act) for the sale of Coal in the Port of London. *Lond.* 1807. folio.

— Bye-laws for regulating Vessels laden with Coals. *Tract.* 8vo. vol. 218. *Lond.* 1838. 8vo.

— Observations on the duty of sea-borne Coal; and on the peculiar duties and charges on Coal, in the Port of London. *Tract.* 8vo. vol. 219. *Lond.* 1831. 8vo.

— Reports from the Select Committee on the Coal Trade (Port of London) Bill, *etc.* *Lond.* 1838. folio.

— Return showing the annual average Price per ton (exclusive of City or other Dues) of the best Coals at the ship's side in the Port of London in the several years from 1881 to 1889, both inclusive. *Lond.* 1890. folio.

DOCKS. *See infra* :—PORT OF LONDON.

DRAINAGE.

— Concise Statements of the main features of the plans for the Drainage of the Metropolis. 2 Series. *Tract.* folio. vol. 13. *Lond.* 1840. folio.

— The Engineer's Report on the Drainage of the Districts North of the Thames. (*Met. Commission of Sewers*.) *Tract.* 8vo. vol. 14. *Lond.* 1851. folio.

— Extracts from Hansard, containing debates and questions in Parliament relating to the Main Drainage of the Metropolis. *Tract.* folio. vol. 42. *Lond.* 1882. folio.

- LONDON.—[DRAINAGE]—*continued*. Great London Drainage Scheme and Victoria Street Sewer. Return from the Metropolitan Commissioners of Sewers. *Lond.* 1853. folio.
- Minutes of Evidence on the Great London Drainage Bill. *Lond.* 1853. folio.
- Letter directing Capt. Galton, J. Simpson, and T. E. Blackwell to consider the plans for the Drainage of London and the Report thereon. *Lond.* 1857. folio.
- Letter containing objections to the plan for the Drainage of the Metropolis, suggested by Capt. Galton, J. Simpson, and T. E. Blackwell. *Lond.* 1857. folio.
- Communication requesting further information, relative to the plan for the Drainage of the Metropolis suggested by Capt. Galton, J. Simpson, and T. E. Blackwell. *Lond.* 1858. folio.
- Report . . . upon the Main Drainage of the Metropolis: presented by Messrs. Bidder, Hawksley, and Bazalgette. *Lond.* 1858. folio
- — Letter from the Government Referees for the Drainage of the Metropolis in answer to the Report made by Messrs. Bidder, Hawksley, und Bazalgette. *Lond.* 1858. folio
- — Brief Observations of Messrs. Bidder, Hawksley, and Bazalgette, on the answer of the Government Referees to their Report on the Drainage of the Metropolis. *Lond.* 1858. folio
- — Letter from the Government Referees upon the Brief Observations of Messrs. Bidder, Hawksley, and Bazalgette, *etc.* *Lond.* 1858. folio
- Letter from G. P. Bidder on the Drainage of the Metropolis. *Lond.* 1858. folio
- Metropolitan Main Drainage. Contract drawings by J. W. Bazalgette. 15 vols. *Lond.* 1859–73. folio
- — Specifications, by J. W. Bazalgette. 10 vols. *Lond.* 1859–73. folio
- Report by J. W. Bazalgette and W. Haywood, upon the scheme of the great London drainage company. *Lond.* 1853. 8vo
- Report of the Committee . . . on the Main Drainage of the Metropolis. (*Met. Board of Works.*) *Tract.* 8vo. vol. 478. *Lond.* 1862. 8vo
- Reports by J. W. Bazalgette, Sir W. Cubitt, and R. Stephenson, to the Metropolitan Commissioners of Sewers, on the high level line for the interception of the drainage north of the Thames, and on the intercepting lines south of the river. *Tract.* 8vo. vol. 108 *Lond.* 1853. 8vo
- Reports and Communications made by the Board of Health to the Secretary of State, Home Department, in reference to the Drainage of the Metropolis. *Lond.* 1854. folio

LONDON.—[DRAINAGE]—*continued*. Western Pumping Station. Specifications of Engines and Buildings, 1872. (*Met. Board of Works*.) Lond. 1872. folio.

— See also :—HAYWOOD, W., and *infra* :—SEWERS AND SEWAGE.

ELECTRIC LIGHT.

— Copy of Report made by Major Marindin on the Electric Lighting of the Metropolis. Lond. 1888. folio.

— Report by J. W. Bazalgette and T. Keats on experiments with the Electric Light on the Victoria Embankment. *Tract*. 8vo. vol. 308. Lond. 1879. 8vo.

— See also :—HAYWOOD, W.

EXHIBITIONS.

— *Colonial and Indian Exhibition*, 1886. Catalogue of New Zealand Exhibits. *Tract*. 8vo. vol. 426. Lond. 1886. 8vo.

— Handbook and Catalogue of the West Indies and British Honduras. Lond. 1886. 8vo.

— Illustrated Handbook of Victoria, Australia. Melbourne, 1886. 8vo.

— Report of the Reception Committee. *Tract*. 8vo. vol. 40. [Lond. 1886.] folio.

— Report of the Royal Commission for the . . . Exhibition. Lond. 1887. 8vo.

— Reports on the Colonial Sections. Lond. 1887. 8vo.

— West Indian Court. *Tract*. 8vo. vol. 426. Lond. 1886. 8vo.

— *Electrical Exhibition*. Official Catalogue. *Tract*. vol. . Lond. 1891. 8vo.

— *Engineering and Metal Trades Exhibition*, 1883. Catalogue. Lond. 1883. 8vo.

— *Exhibition of the Works of Industry of all Nations*, 1851. Descriptive and illustrated Catalogue of the Great Exhibition. 3 vols. Lond. 1851. folio.

— Lectures on the results of the Great Exhibition of 1851, *etc*. Lond. 1852–53. 8vo.

— First (–7th) report of the Commissioners. Appendices. Lond. 1852–89. 8vo.

— Reports by the juries on the subjects in the thirty classes into which the exhibition was divided. 3 vols. Lond. 1852. 4to.

— [Another edition.] Lond. 1858. 8vo.

— Statement of Proceedings preliminary to the Great Exhibition, 1851. *Tract*. folio. vol. 7. Lond. 1851. folio.

— *German Exhibition*, 1891. Extracts from notices of the press on the Fine Art Section. Lond. 1891. 8vo.

— Uebersicht und Vorschriften. Berlin, 1890. folio.

— *International Exhibition*, 1862. Belgique. Catalogue des produits industriels et des œuvres d'art. Bruxelles, 1862. 8vo.

- LONDON.—[EXHIBITIONS.]—*International Exhibition, 1862—continued*
 Civil engineering, architectural and building contrivances. Class 10
 Section A. Report of the jury. *Lond.* 1862. 4to
- Decision of H. M. Commissioners on points relating to the
 Exhibition. *Tract. folio. vol. 7.* *Lond.* 1861. folio
- Empire français. Notices sur les modèles, cartes et dessins
 relatifs aux travaux publics, réunis par les soins du Ministère de
 l'Agriculture. *Paris*, 1862. 8vo
- Études sur l'Exposition universelle de Londres en 1862
 Renseignements techniques sur les procédés nouveaux manifestés
 par cette exposition, etc. *Paris*, 1863. 8vo
- Horological Instruments. Report of the Jury. *Tract. 4to. vol*
 50. [*Lond.* 1863 ?] 4to
- Illustrated Catalogue. 4 vols. *Lond.* 1862. 4to
- Official classified and descriptive Catalogue of the contributions
 from India to the London Exhibition of 1862 . . . By A. M
 Dowleams. *Calcutta*, 1862. 4to
- Londoner Ausstellung, 1862. Special-Catalog der gewerblicher
 Ausstellung des Zollvereins, etc. *Berlin*, 1862. 8vo
- Medals and Honourable mentions awarded by the International
 Juries, etc. *Lond.* 1862. 4to
- Notice on the objects sent . . . by the Imperial Royal Austrian
 State Railway Company. *Tract. 4to. vol. 49.*
Vienna, 1862. 4to
- Official Catalogue [of the] Industrial Department. 2nd edition
 Appendix. *Lond.* 1862. 8vo
- Rapports des membres de la section française du jury inter-
 nationale sur l'ensemble de l'exposition, etc. 6 vols.
Paris, 1862. 8vo
- Reports by the juries. *Lond.* 1863. 8vo
- Special Catalogue of the Zollverein Department. Published by
 the Commissioners of the Zollverein Governments.
Berlin, 1862. 8vo
- *International Exhibition, 1872.* Ceremonial to be observed at the
 State Opening. *Lond.* 1871. 8vo
- Official Catalogue, Fine Arts Department. 2nd edition.
Lond. [1872.] 8vo
- Official Reports on the various Sections of the Exhibition
 Edited by . . . Lord Houghton. *Lond.* [1872.] 4to
- *International Exhibition of Mining and Metallurgy, 1890.* Official
 Catalogue. *Lond.* 1890. 8vo
- Official Handbook . . . South African Section, etc.
Lond. 1890. 8vo
- Preliminary Prospectus. *Tract. folio. vol. 45.* *Lond.* 1890. folio

LONDON.—[EXHIBITIONS.]—*International Exhibition of Mining and Metallurgy, 1890—continued.* Record of the Mines of South Australia, etc. 1890.

- Report on Tin Ore, Cornwall, Tasmania. 1890.
- Republic of Uruguay. 1890.
- Catalogue of Exhibits of Western Australia. *Perth*, 1890. 8vo.
- Catalogue of Exhibits in the New South Wales Court.
Lond. 1890. 8vo.
- Catalogue of Mineral Exhibits from South Australia, etc.
Lond. 1890. 8vo.
- Catalogue of Minerals exhibited by the Local Committee,
Charters Towers Gold Field, New Zealand Government.
Lond. 1890. 8vo.
- Certificate of Rock Drill Competition. *Lond.* 1890. folio.
- New South Wales: its Mineral Wealth, etc. 1890.
- *International Fisheries Exhibition, 1883.* The Awards of the
International Juries. 2nd edition. *Lond.* 1883. 8vo.
- Official Catalogue. *Lond.* 1883. 8vo.
- *International Health and Education Exhibition, 1884.* A catalogue
... of the Exhibits from the Department of Education, Empire
of Japan. [Compiled by Seichi Tejima.] *Tract.* 8vo. vol. 397.
Lond. 1884. 8vo.
- A descriptive catalogue of the exhibits sent by the Sanitary
Bureau of the Japanese Home Department. *Tract.* 8vo. vol. 397.
Lond. 1884. 8vo.
- General outlines of Education in Japan. *Tract.* 8vo. vol. 397.
Lond. 1884. 8vo.
- Descriptive list of the Awards made by the International Juries.
Tract. 8vo. vol. 405. *Lond.* 1884. 8vo.
- The Health Exhibition Literature. 19 vols. *Lond.* 1884. 8vo.
 - Vol. I.—III. Health in the Dwelling.
 - IV.—VI. Health in Diet.
 - VII.—IX. Health in relation to Civic Life.
 - X.—XII. General Hygiene.
 - XIII.—XVI. Conference on Education.
 - XVII.—XIX. Miscellaneous.
- Official Catalogue for Jury. *Lond.* 1884. 8vo
- Special Catalogue of the Education Division. *Tract.* 8vo. vol.
Lond. 1884. 8vo.
- *International Inventions Exhibition, 1885.* Official Catalogue.
Lond. 1885. 8vo.
- *Medical and Sanitary Exhibition, 1881.* See PARKES MUSEUM.
- *Milling Machinery Exhibition, 1881.* Official Catalogue. *Tract.*
8vo. vol. 334. *Lond.* [1881.] 8vo.
- *National Water Supply Exhibition.* Handbook to the first public
Exhibition of Apparatus, Models, Drawings, Maps, Plans . . .
2nd edition. *Lond.* 1879. 8vo.

- LONDON.—[EXHIBITIONS]—*continued*. *Naval and Submarine Engineering Exhibition*, 1882. Official Catalogue. *Lond.* [1882.] 8vo.
 — *Naval Exhibition*, 1891. Official Catalogue and Guide. *Lond.* 1891. 8vo.

EXPLOSIONS.

- Report by Mr. A. G. V. Harcourt on a Gas Explosion at Tottenham Court Road on the 15th July, 1880. *Lond.* 1880. folio.
 — Report on an Explosion which occurred at Victoria Station, on 26 Feb. 1884. *Lond.* 1884. folio.
 — Report on two explosions on the Underground Railway, 30th October, 1883 : by Col. Majendie and Capt. Cundill. *Lond.* 1884. folio.

FIRES AND FIRE BRIGADE.

- Report of the chief officer (Sir E. M. Shaw) of the metropolitan fire brigade, on the state of the brigade, and the fires in London during the year 1868 (1869, 1881–88). *Lond.* 1869–89. 8vo.
 — The City of London Fire Inquests Act, 1888. *Lond.* 1888. folio.
 — Letters and Reports concerning Water Supply and Fire prevention in the Metropolis. *Lond.* 1874. folio.
 — Report from the Select Committee on the Metropolitan Fire Brigade. *Lond.* 1876, 77. folio.
 — Reports . . . on the alleged defective Supply of Water by the New River Company at the late Fires in Fleet Street and Ludgate Hill. *Lond.* 1824. 4to.
 — Report on the conclusions arrived at by the Select Committee of the House of Commons on the Metropolitan Fire Brigade. (*Met. Board of Works.*) *Tract.* 8vo. vol. 288. *Lond.* 1877. 8vo.
 — Report on Water Jets for extinguishing Fires : by J. W. Bazalgette, F. J. Bramwell and E. Easton. (*Met. Board of Works.*) *Tract.* 8vo. vol. 478. *Lond.* 1877. 8vo.
 — Report by J. W. Bazalgette, F. J. Bramwell, and E. Easton, upon the best means of providing an efficient supply of water for extinguishing fires, etc. *Tract.* 8vo. vol. 274. *Lond.* 1877. 8vo.
 — Statement by the East London Waterworks Company, and correspondence between that Company and the Metropolitan Board of Works relative to the Metropolitan Water-Supply for Fires. 1872–1876. *Tract.* 8vo. vol. . *Lond.* 1876. 8vo.
 — See *infra* :—WATER SUPPLY. A bill for making . . . provision for a constant Supply of Water and for protection . . . against Fire. 1875.

GAS.

- Abstract of the Provisions of the City of London Gas Act, 1868. (*Met. Board of Works.*) *Tract.* 8vo. vol. 478. *Lond.* [1868.] 8vo.

LONDON.—[GAS]—*continued*. Accounts of the Metropolitan Gas Companies, 1856, (1857, etc.) *Lond.* 1856, etc. folio.

— *See also* :—FIELD, J.

— Analyses of Gas Companies' Bills to be introduced into Parliament in the Session of 1869. (*Met. Board of Works.*) *Tract.* 8vo. vol. 478. *Lond.* [1869.] 8vo.

— Copy of Letter from the Board of Trade to the Metropolitan Board of Works forwarding Parliamentary Notice relating to the Supply of Gas to the Metropolis. (*Met. Board of Works.*) *Tract.* 8vo. vol. 478. *Lond.* 1868. 8vo.

— Correspondence with the Board of Trade on the subject of the steps to be taken in the ensuing session of Parliament with reference to the Gas Supply of the Metropolis. (*Met. Board of Works.*) *Tract.* 8vo. vol. 478. *Lond.* 1869. 8vo.

— Extract from the Report of the Parliamentary Committee on the Imperial and South Metropolitan Gas Companies' Bills. (*Met. Board of Works.*) *Tract.* 8vo. vol. 478. *Lond.* 1869. 8vo.

— Gas Works and Gas Lighting in London. *Tract.* 8vo. vol. 99. (An extract.) [1850?] 8vo.

— A letter to the Earl of Carlisle . . . on the Cost and Supply of Gas in the Metropolis. By A Civil Engineer. *Tract.* 8vo. vol. 96. *Lond.* 1849. 8vo.

— Letter, with Analysis of the Accounts kept by the City of London Gas Company for the half-year ending 31st December, 1868. Also a letter subsequently received from Mr. Hughes transmitting Analysis of the Accounts of the Gas Light and Coke Company for the same period. (*Met. Board of Works.*) *Tract.* 8vo. vol. 478. *Lond.* 1869. 8vo.

— Metropolitan gas inquiry, 1860. Report of the proceedings before the committee of the House of Commons on the Metropolis Gas Regulation Bill. *Lond.* 1860. 8vo.

— Notification of the Gas Referees, for the years 1873-74 to 1880-81. *Lond.* 1873-80. folio.

— Report from the Select Committee on the Metropolitan Gas Companies' Bill. *Lond.* 1875. folio.

— Report of the Special Committee on the Supply of Gas to the Metropolis. (*Met. Board of Works.*) *Tract.* 8vo. vol. 478. *Lond.* 1867. 8vo.

— Report [on the several references relative to the increase of price of Gas]. *Tract.* folio. vol. 26. *Lond.* 1874. folio.

— Special Report from the Select Committee on the Metropolis Gas Bill; together with the proceedings of the Committee, minutes of evidence, appendix. *Lond.* 1867. folio.

— Statement of the Course taken by the Board with regard to the Imperial Gas Company's Bill now before Parliament. (*Met. Board of Works.*) *Tract.* 8vo. vol. 478. *Lond.* 1869. 8vo.

LONDON.—[GAS]—*continued*. Testings of Gas. Quarterly Report, from the Chief Gas Examiner to the Court of Common Council, 1868–78. *Lond.* 1868–78.

LIGHTING. *See supra* :—GAS and ELECTRIC LIGHT. *See also* HAYWOOD, W.

LOCAL MANAGEMENT. An Act for the better Local Management of the Metropolis, 1855. *Lond.* 1885. f

— Metropolis Local Management Amendment Act, 1862. V notes and an index. *Lond.* 1862.

— 4th edition. With additions. *Lond.* 1859.

LODGING HOUSES.

— Report on the common and model Lodging Houses of the Metropolis. By G. Glover. *Lond.* 1855.

— Rules and regulations for Common Lodging Houses within City of London. [*Commissioners of Sewers.*] *Tract.* 8vo. vol. *Lond.* 1852.

MARKETS.

— An appeal to the British public ; or the abuses and advantages of a central Cattle Market fairly considered. *Tract.* 8vo. 216. *Lond.* [1850 ?]

— London Central Markets Act, 1886. *Lond.* 1886. f

— The proposed central live and dead Meat Market for Metropolis. The opinions of, and extracts from, the principal journals. Part I. *Tract.* 8vo. vol. 216. *Lond.* 1851.

METEOROLOGY. Report on the Meteorology of London and relation to the epidemic of Cholera, by J. Glaisher. (*Gen. B of Health.*) *Lond.* 1855.

METROPOLITAN BOARD OF WORKS.

— Account in Abstract, showing the Receipt and Expenditure of the Metropolitan Board of Works from the 1st January to March, 1889. *Lond.* 1890.

— Metropolitan Board of Works Bill. Minutes of Evidence Proceedings. *Lond.* 1874.

— Minutes of Proceedings. 54 vols. *Lond.* 1858–87.

— Report pursuant to the 18th and 19th Vic., c. 120, s. Presented to the Board 10th August, 1860. *Tract.* folio. vo *Lond.* 1860.

— Reports. 5 vols. *Lond.* 1858–89.

POLICE. Report of the Commissioner of Police of the Metropolis for the year 1890. *Lond.* 1891.

— Preventive Police. [A review of the Reports from the Select Committees of the House of Commons on the state of the Police of the Metropolis, 1816–1828, and other works on the subject of Police.] *Tract.* 8vo. vol. 452. [*Edinburgh*, 1829.]

(From the "Edinburgh Review.")

LONDON—*continued.*

POOR. State of the parish poor children in London and Middlesex.
Lond. 1778. folio.

PORT OF LONDON.

- Act for rendering more commodious and for better regulating the Port of London. *Lond.* 1799. folio.
- Act to authorize the advancement of a further sum of Money . . . to be applied in the improvement of the Port of London. *Lond.* 1803. folio.
- Bye-laws. *Tract.* 8vo. vol. 265. *Lond.* 1807. 8vo.
- Bye-laws for the government of the harbour-masters and for regulating the port. *Tract.* 8vo. vol. 218. *Lond.* 1837. 8vo.
- Extracts from the several Acts of Parliament relative to Compensations. *Tract.* 8vo. vol. 265. *Lond.* 1806. 8vo.
- A Letter to a friend on Commerce and Free Ports, and London Docks. *Tract.* 8vo. vol. 218. *Lond.* 1796. 8vo.
- Minutes of Evidence taken at the Committee on the Bill for making Wet Docks, Basons, Cuts and other works . . . within the Port of London. *Lond.* 1799. folio.
- Minutes of Evidence taken at the Committee on the Bill for rendering more commodious . . . the Port of London. *Lond.* 1799. folio.
- Miscellaneous Reports by the House of Commons on the Port of London : with engravings. *Lond.* 1801. folio.
- Observations in justification of the establishment of Wet Docks in the Port of London, *etc.* *Tract.* 8vo. vol. 265. *Lond.* 1817. 8vo.
- On Wet Docks, Quays, and Warehouses for the port of London, with hints respecting trade. *Tract.* 8vo. vol. 213. *Lond.* 1793. 8vo.
- Report from the Committee appointed to enquire into the best mode of providing sufficient accommodation for the increased Trade and Shipping of the Port of London. *Lond.* 1796. folio.
- Report from the Select Committee upon the Improvement of the Port of London. *Lond.* 1801. folio.
- Report from the Select Committee on the Port of London : together with the Minutes of Evidence and Appendix. *Lond.* 1836. folio.
- Reports from Committees of the House of Commons upon the improvement of the Port of London, *etc.* 1793-1802. (Atlas of plates.) *Lond.* 1803. folio.
- Reports on Improvements, by a Committee of the Common Council. *Tract.* 8vo. vol. 218. *Lond.* 1797. 8vo.

LONDON.—[PORT OF LONDON]—*continued*. Third Report from the Select Committee upon the Improvement of the Port of London.

Lond. 1800. folio.

- Review of Mr. Longlands' pamphlet, entitled "A Review of the Warehousing System," or the advocate for exclusive privileges unmasked ; with observations upon the necessity of additional wet dock accommodation in the port of London. *Tract.* 8vo. vol. 21.

Lond. 1824. 8vo.

[Works relating to particular Docks are entered under the names of the Docks to which they refer, *e.g.*, EAST INDIA DOCK, *etc.*]

PUBLIC HEALTH.

- An Act to consolidate and amend the Laws relating to Public Health in London. *Lond.* 1891. 8vo.

- Metropolitan Sanitary Commission. First (second) Report of the Commissioners appointed to inquire . . . what means may be requisite for the improvement of the Health of the Metropolis.

Lond. 1847, 48. folio.

- — [Another edition.] 2 vols.

Lond. 1848. 8vo.

- Report of the Committee of Health . . . on the report of the Medical Officer of Health of the City of London, Nov. 6, 1849.

Lond. 1850. 8vo.

RAILWAYS.

- An Act for making a Railway from the Minories to Blackwall.

Lond. 1836. folio.

- Central London Railway Act. Petitions, Minutes of Proceedings and Evidence.

Lond. 1890. folio.

- London Railways : a contribution to the parliamentary papers of the session. By a Middle-aged Citizen. *Tract.* 8vo. vol. 179.

Lond. 1867. 8vo.

- Metropolitan District Railway Bill. Minutes of Evidence and Speeches.

Lond. 1883. folio.

- Minutes of proceedings of select committee on London Commissioners of Sewers (Ventilation of Railways) Bill.

Lond. 1883. folio.

- Third Report from the Select Committee of the House of Lords on Metropolitan Railway Communication : with the Proceedings of the Committee, Minutes of Evidence, and Appendix.

Lond. 1863. folio.

- Report of Parliamentary Committee on the Inner Circle Railway. (*Met. Board of Works.*) *Tract.* 8vo. vol. 478.

Lond. 1873. 8vo.

- Report of Special Meeting of Court of Common Council, 12th May, 1874 [on the Inner Circle Railway]. *Tract.* 8vo. vol. 478.

Lond. 1874. 8vo.

LONDON.—[RAILWAYS]—*continued*. Report on Railway Extensions in the Metropolis. (*Met. Board of Works*.) *Tract. 8vo. vol. 478.*
Lond. 1873. 8vo.

— Report . . . on the Electric and Cable Railways (Metropolis),
etc. Lond. 1892. folio.

— Report on the Inner Circle of Railways, *etc.* (*Met. Board of Works*.) *Tract. 8vo. vol. 478.*
Lond. 1874. 8vo.

— Report to the Board of Trade upon the subject of Workmen's Trains on the Metropolitan Lines : by Major Marindin.
Lond. 1883. folio.

— Report to the Court of Common Council from the Local Government and Taxation Committee relative to the Electric Railway Bills in Parliament. *Tract. 8vo. vol. 47.* *Lond. 1892. folio.*

— Reports by J. W. Bazalgette and G. Vulliamy on the proposals submitted to the Board for the completion of the inner circle of railways in the Metropolis, and the formation of certain new thoroughfares in the City of London. (*Met. Board of Works*.) *Tract. 8vo. vol. 478.*
Lond. 1873. 8vo.

— Resolution of Board upon Contribution. Inner Circle Railway. (*Met. Board of Works*.) *Tract. 8vo. vol. 478.*
Lond. 1874. 8vo.

— Statements relating to Workmen's Trains on the Metropolitan Lines, furnished to the Board of Trade by the Railway Companies having Termini in the Metropolis. *Lond. 1890. folio.*

SEWERS AND SEWAGE.

— Account, in abstract, of receipt and expenditure of the Metropolitan Commission of Sewers for 1849–54.
Lond. 1850–55. folio.

— Act to consolidate the Metropolitan Commission of Sewers.
Lond. 1848. folio.

— The agricultural Value of the Sewage of London, examined in reference to the principal schemes submitted to the Metropolitan Board of Works. *Lond. 1865. 8vo.*

— Additional Correspondence in reference to the Utilization of the Sewage of the Metropolis. (*Met. Board of Works*.) *Tract. 8vo. vol. 478.*
Lond. 1864. 8vo.

— Further Communications relative to the Utilization of the Sewage of London. (*Met. Board of Works*.) *Tract. 8vo. vol. 478.*
Lond. 1864. 8vo.

— Further Communications from Mr. Shepherd, Messrs. Napier and Hope, Mr. Bramwell, Mr. Moore, and Messrs. Fuller and Saltwell, in reference to a Concession of the Sewage of London. (*Met. Board of Works*.) *Tract. 8vo. vol. 478.* *Lond. 1862. 8vo.*

— A Bill to enable Local Authorities to deal separately with the Sewage and Drainage of their districts. *Lond. 1890. folio.*

LONDON.—[SEWERS AND SEWAGE]—*continued*. The calculation Mr. Bazalgette as to the slope, size, velocity of flow, and charging power of the various intercepting lines of sewer north of the Thames, designed by Messrs. Bazalgette and Haywood (*Met. Commission of Sewers*.) *Tract. 8vo. vol. 152.*

Lond. 1855.

— Communications referred to in the Tenders for the Southern Sewage, opened by the Board on the 7th July, 1865, also the Agreement between the Board and Messrs. Napier and I upon which several of the tenders for the Southern Sewage based. (*Met. Board of Works*.) *Tract. 8vo. vol. 478.*

Lond. 1865.

— Consolidated Commissions of Metropolitan Sewers. Papers from December, 1837, to August, 1851. 4 vols.

Lond. 1837–51.

— Copies of Reports of Surveyors of Metropolitan Commissions of Sewers on the Sewers of the Metropolis. *Lond. 1855.*

— Copies of Reports on the Working of Pipe Sewers of Mr. Lovick, Grant, Cooper, Donaldson, and Roe, and of Notes of House-to-House Inquiry made in Ormond Terrace by Mr. Ward accompanied by Mr. Cresy. *Lond. 1855.*

— Copy of the reports of Mr. Bazalgette relating to the Sewers of the Metropolis. *Lond. 1855.*

— Copy of Correspondence between the Commissioners of Sewers and Mr. G. Gurney in reference to the experiment of the Sewer Jet in purifying the pestilential Sewer in Friar Street, Borough. *Lond. 1850.*

— Estimate of the cost of the new Victoria Street Sewer.

Lond. 1859.

— Extract from Report . . . with reference to the tender of Mr. Ellis, for utilizing the Southern Sewage. (*Met. Board of Works*.) *Tract. 8vo. vol. 478.*

Lond. 1866.

— General Particulars and Descriptions for the information of parties desirous of tendering for . . . Sewers, Drains, Ventilators, closets, Cesspools, Ashpits, etc. (*Met. Commissioners of Sewers*.) *Tract. folio. vol. 8.*

Lond. 1850.

— Metropolitan Sewers. Copies of the Return to an order of the Special Court of Metropolitan Sewers held the 29th August,

Lond. 1850.

— Minutes of Evidence taken before the commission on Metropolitan Sewage Discharge. Vol. 2.

Lond. 1885.

— Proceedings of the Court of Sewers, London, and the Black Bridge Committee relative to the Culvert and Tide Flaps at the mouth of the Fleet Ditch Sewer. 1834–1840.

Lond. 1840.

- LONDON.—[SEWERS AND SEWAGE]—*continued*. Report . . . as to the Cleansing and Ventilation of Sewers, *etc.* (*Met. Board of Works.*) *Tract. folio. vol. 42.* *Lond. 1886. folio.*
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- Report on the Metropolitan Sewage Manure Company Bill. *Lond. 1846. folio.*
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— Report of Thos. Telford on the effects which will be produced on the river Thames by the rebuilding of London Bridge. *Lond.* 1823. folio.

— Report to the Court of Common Council from the committee for letting the Bridge House Estates. *Lond.* 1823. folio.

— Report to the Court of Common Council from the Committee for rebuilding London Bridge. Memorial and Petition of G. Allen. Report of John Rennie. *Lond.* 1827–29. folio.

— Reports to the Court of Common Council from the Committee for Rebuilding London Bridge, from the Approaches Committee, and from the Improvement Committee. *Lond.* 1831–56. folio.

— Report from the Select Committee (Lords) on the London Bridge Bill. *Lond.* 1879. folio.

LONDON BRIDGE WATERWORKS. Act for the removal of the London Bridge Waterworks. *Lond.* 1822. folio.

— Observations on the application for the removal of the London Bridge waterworks. *Lond.* 1821. folio.

(Published by the Court of Common Council.)

LONDON, BRIGHTON AND SOUTH COAST RAILWAY. Address to the London, Brighton & South Coast railway proprietary, on the project for removing the Crystal Palace to Sydenham, in connection with their railway. By a Shareholder. *Tract.* 8vo. vol. 100. *Lond.* 1852. 8vo.

LONDON, BRIGHTON AND SOUTH COAST RAILWAY--
continued. Specifications, contracts, and estimates of works constructed on the London, Brighton & South Coast Railway, and the London & South Western Railway. 2 vols.

Lond. 1863-85. folio.

- Minutes of Evidence taken before the Committee on the Bill for the London and Brighton direct Railway as proposed by Sir John Rennie and J. U. Rastrick. *Lond.* 1837. folio.

- Minutes of evidence taken before the Committee [of the House of Commons] on the London and Brighton Railway Bills (Stephenson's Line). (Incomplete.) *Lond.* 1837. folio.

- Minutes of evidence taken before the Committee [of the House of Commons] on the London and Brighton Railway Bill [Stephenson's, Rennie's, and Cundy's Lines]. *Lond.* 1836. folio.

- [Engineering evidence given by R. Stephenson, G. P. Bidder, J. Rennie and J. Locke.] *Lond.* [1836?] 8vo.

- Plan of a proposed railway, to join the intended railway from London to Southampton, and to form a communication between London and Brighton, by way of Shoreham. Messrs. George and Robert Stephenson, consulting engineers. G. P. Bidder, acting engineer. 1836. folio.

- Minutes of Evidence taken before the Lords Committees to whom the bill intituled "An act for making a Railway to join the London and Southampton Railway near London, and to form a communication between London and Brighton by way of Shoreham" was committed. *Lond.* 1836. folio.

- Railway Accidents. (Excessive Hours of Work.) Correspondence between the Board of Trade and the London, Brighton & South Coast Railway Company. *Lond.* 1889. folio.

- (Rates and Charges.) Provisional Order. Bill. *Lond.* 1891. folio.

- Reply of the Committee of the Direct London and Brighton Railway to the Statement of Mr. Stevenson's (*sic*) Committee in answer to their Prospectus. *Tract. folio. vol.* 49.

[*Lond.* 1836?] folio.

- Report of the Directors of the London and Brighton Railway Company, etc. *Tract. folio. vol.* 49. *Lond.* 1837. folio.

- Reports on the London and Brighton Railway. 1837. See RASTRICK, J. U., and LOCKE, J.

- Statements and Reflections on Railroads, particularly with reference to the proposed railroad without a tunnel, and the competition for the line between London and Brighton.

Lond. 1836. 8vo.

LONDON CENTRAL (SUBWAY) RAILWAY. Minutes of Evidence. *Lond.* 1889. folio.

LONDON CHAMBER OF COMMERCE. Boilers Registration Bill. *Tract. . col. . Lond.* 1891.

LONDON, CHATHAM AND DOVER RAILWAY. The London, Chatham and North Kent (Independent), and the South Eastern (Dover). *Tract. 8vo. vol. 228.* *Lond. 1845. 8vo.*

— (Rates and Charges.) Provisional Order. A Bill. *Lond. 1891. folio.*

— (Rates and Charges.) Provisional Order. Bill. *Lond. 1891. folio.*

— London, Chatham & Dover Railway (Metropolitan Extensions) Bill. Minutes of Evidence. House of Commons and House of Lords. Session 1860. 3 vols. *Lond. 1860. folio.*

— Specifications for Railway Carriages and Locomotive Engines. *Lond. 1882. 8vo.*

LONDON CITY MISSION. [Information relating to the] London City Mission (Civil Engineers' Association). 1892-93. *Tract. 8vo. vol.* *Lond. 1893. 8vo.*

LONDON DIOCESAN CHURCH BUILDING SOCIETY. Report of the London Diocesan Church Building Society to promote the building, enlargement, and endowment of churches, and the erection of parsonage houses in the diocese of London. *Tract. 8vo. vol. 115.* *Lond. 1855. 8vo.*

LONDON DOCKS. Answer to objections against the London Docks. *Tract. 8vo. vol. 213.* *Lond. 1796. 8vo.*

— List of Proprietors of the London Dock Company. *Tract. 8vo. vol. 218.* *Lond. 1833. 8vo.*

— Minutes of the Evidence taken at the Committees on the London Docks Bill. 1797 and 1799. *Lond. 1797, 99. folio.*

— Observations on a pamphlet entitled, "A plan of the London Dock," showing the impracticability of the proposed plan, and demonstrating the advantages which would arise to the commerce of the metropolis, by extending the port, *etc.* *Tract. 8vo. vol. 213.* *Lond. 1794. 8vo.*
(Imperfect.)

— Observations upon the case of the London Dock Company. *Tract. 8vo. vol. 21.* *Lond. 1825. 8vo.*

— Plan of the London Dock, with some observations respecting the river immediately connected with docks in general, and of the improvement of navigation. *Tract. 8vo. vol. 75.* *Lond. 1794. 8vo.*

— Reasons in favour of the London Docks. *Tract. 8vo. vol. 213.* *Lond. 1796. 8vo.*

LONDON ELECTRICAL SOCIETY. Transactions and Proceedings . . . 1837-40. *Lond. 1841. 4to.*

— Proceedings. Sessions 1841-42 and 1842-43. *[Lond. 1841-43.] 8vo.*

LONDON GRAND JUNCTION RAILWAY. *See* LONDON AND NORTH WESTERN RAILWAY.

LONDON HYDRAULIC POWER COMPANY. Public Hydraulic Power supplied in the City of London, Westminster, Southwark and Kensington Court. *Tract. 8vo. vol. 410. Lond. 1886. 8vo.*

LONDON INSTITUTION. *Journal. 4 vols. (No more published.) Lond. 1871-75. 8vo.*

LONDON LABOUR AND CONCILIATION BOARD. Second annual report, for . . . 1892. [With appendix containing the 1st annual report.] *Tract. 8vo. vol. . Lond. 1893. 8vo.*

LONDON SANITARY PROTECTION ASSOCIATION. Sixth Annual Report, 1886. List of Members and other documents. *Lond. 1886, 87. 8vo.*

LONDON UNIVERSITY. *Calendar. 1874 and 1886, (1887, etc.) Lond. 1874, 86, etc. 8vo.*

— Examination for the degree of Bachelor of Laws; also for matriculation, in the year 1841. *Tract. 8vo. vol. 67. Lond. 1841. 8vo.*

— Examinations for the degree of Bachelor of Medicine; also Doctor of Medicine, in the year 1841. *Tract. 8vo. vol. 69. Lond. 1841. 8vo.*

— London University Guide. 1891-92. *Lond. 1891. 8vo.*

LONDON (WATFORD) SPRING WATER COMPANY. Report from the provisional directors . . . with the financial statement . . . and Mr. Hope's opening speech before the parliamentary Committee. *Tract. 8vo. vol. 109. [Lond.] 1852. 8vo.*

LONDON, Ontario. Report of the Provincial Board of Health of Ontario, on Sewage Disposal at the London Asylum under the direction of G. E. Waring, Jr. *Tract. 8vo. vol. 496. Toronto, 1890. 8vo.*

LONDONDERRY RAILWAY. Londonderry (Seaham to Sunderland) Railway. Report by the Board of Trade on the Classification of Merchandise Traffic and schedule of maximum rates. *Lond. 1891. folio.*

LONG, G., and PORTER, G. R. The Geography of Great Britain. Part 1. England and Wales. With a supplementary body of Statistics, to the year 1850, by Hyde Clarke, Esq. *Lond. [1850.] 8vo.*

LONG, J. Ballinderry Lake District. Preliminary Report . . . on the drainage and Improvement of the Lands in the above district. *Dublin, 1846. 8vo.*

— Ballybay River, near Athlone, in the County of Roscommon. Report . . . on the proposed Drainage of the Flooded Lands in this district. *Dublin, 1846. 8vo.*

— Hind River District, County of Roscommon. Report . . . on the Drainage of the Lands in the above district. *Dublin, 1846. 8vo.*

- LONG, J. H., and BUEL, R. H. The Cadet Engineer ; or, steam for the student. *Philadelphia*, 1865. 8vo.
- LONG, S. On the Necessity for the systematic Training of Naval Officers in the art of Manœuvring Ships under Steam. *Tract.* 8vo. vol. 464. *Lond.* 1884. 8vo.
- LONGDIN, T. *See* WARRINGTON. On the proposed Improvements at the Manure Depôt, Longford. 1879.
- LONGLANDS, H. *See* LONDON.—PORT OF LONDON. Review of Mr. Longlands' pamphlet entitled "A Review of the Warehousing System," etc. 1824.
- LONGNOSE POINT, N.S.W. (Papers in reference to Construction of Railways to Longnose Point.) *Sydney*, 1889. folio.
- LONGRIDGE, J. A. The Artillery of the future, and the new Powders. *Lond.* 1891. 8vo.
- Cheap Railways for the Colonies. *Tract.* 8vo. vol. 260. *Lond.* 1876.
- Further Remarks on our Ordnance Administration. *Tract.* 8vo. vol. 419. *Lond.* 1886. 8vo.
- Improvements in the Construction of Ordnance . . . and in the Manufacture and Method of Discharging Projectiles. [Patent Specification.] *Tract.* 8vo. vol. 413. *Lond.* 1856. 8vo.
- Improvements in the Construction or the Manufacture of Guns and Artillery, etc. [Patent Specification.] *Tract.* 8vo. vol. 413. *Lond.* 1855. 8vo.
- Internal Ballistics. *Tract.* 8vo. vol. 483. *Lond.* 1887. 8vo.
- Internal Ballistics. *Lond.* 1889. 8vo.
- Is England to be caught napping? A letter addressed to the Rt. Hon. Hugh Childers. *Tract.* 8vo. vol. 367. *Lond.* 1885. 8vo.
- Longridge's Patent Locomotive. *Tract.* 8vo. vol. 416. *Lond.* 1885. 8vo.
- Memorandum on the Cause of Rupture of Jacket 6" B.L. Wire Gun. 26 April, 1888. *Tract.* 8vo. vol. 454. *Lond.* 1888. 8vo.
- Modern Ordnance: a letter to the Secretary of State for War. *Tract.* 8vo. vol. 336. *Lond.* 1882. 8vo.
- Naval Guns and their supply. *Tract.* 8vo. vol. 481. *Lond.* 1889. 8vo.
- On the action of a Jet of Steam as a motive power for purposes of Ventilation. *Tract.* 8vo. vol. 101. *Newcastle-upon-Tyne*, 1852. 8vo.
- Our new Armament. Letter to the Marquis of Hartington. *Tract.* 8vo. vol. 362. *Lond.* 1884. 8vo.
- Our Ordnance Administration. *Tract.* 8vo. vol. 404. *Lond.* 1885. 8vo.

- LONGRIDGE, J. A.—*continued*. Railway Extension. *Tract. 8vo. vol. 279. Lond. 1877. 8vo.*
- Report on the Calcutta and South Eastern railway, from Calcutta to the river Mutla, etc. *Tract. folio. vol. 1. Lond. 1857. folio.*
- Smokeless Powder and its influence on Gun Construction. *Tract. 8vo. vol. 495. Lond. 1890. 8vo.*
- A Treatise on the Application of Wire to the Construction of Ordnance. *Lond. 1884. 8vo.*
- Ueber die Konstruktion der Geschützrohre . . . Aus den . . . Proceedings of the Inst. of C.E. . . ins Deutsche übertragen von J. Hartmann. *Tract. 8vo. vol. 131. Hannover, 1861. 8vo.*
- Why did the Thunderer's gun burst? *Tract. 8vo. vol. 312. Lond. 1879. 8vo.*
- LONGRIDGE, M. Trial of the Engine and Boilers at Messrs. T. Nuttall & Sons, Oak Mill, Farnworth, conducted on behalf of the "Engine, Boiler, and Employers' Liability Insurance Co., Lim." *Tract. 8vo. vol. 327. Manchester, [1880?] 8vo.*
- LOOMIS, E. An Introduction to Practical Astronomy, with a collection of astronomical tables. 7th edition. *New York, 1868. 8vo.*
- A Treatise on Meteorology; with a collection of meteorological tables. *New York, 1868. 8vo.*
- LOOSEY, C. F. Collection of the Laws of Patent Privileges of all the countries of Europe, the United States of America, and the Dutch West Indies. *Vienna, 1849. 8vo.*
- LOPES, A. DE C. Le soleil, comment se forme sa lumière, ce qu'elle est, l'éther, taches et éruptions solaires. *Tract. 8vo. vol. 410. Rio de Janeiro, 1886. 8vo.*
- LOPEZ, A. Y C^a. Experimentos sobre la resistencia y comparacion económica de los cementos españoles y extranjeros empleados en el dique de Carena construido . . . por la empresa de vapores-correos transatlánticos A. Lopez y C^a. *Tract. 8vo. vol. 425. Barcelona, 1884. 8vo.*
- LOPEZ, M. Programa de los exámenes de ingreso en la Escuela superior de ingenieros de caminos, canales y puertos. *Madrid, 1863. 8vo.*
- LORD, E. Comstock Mining and Miners. [*U.S. Geol. Survey. Monograph iv.*] *Washington, 1883. 4to.*
- LORD, W., Lieut. R.N. A Chart of the Approaches to Liverpool, from a survey made by direction of the trustees of the Liverpool docks. *Liverpool, 1852. 8vo.*
- The high and low water features of the River Mersey, etc. 1842–52. *See MERSEY, River.*

- LORENZ, A. Praktischer Tunnelbau in seinem ganzen Umfange, nebst Beschreibung ausgeführter Tunnelbauten. (Atlas of plates.)
Wien, 1860. 8vo. and folio.
- LORENZ, O. Catalogue général de la Librairie française depuis 1840. Vols. 5, 6, 9, and 10 (1866–85). 4 vols.
Paris, 1876–87. 8vo.
- LORGNA, A. M. *See* TURAZZA, D. Memorie del Lorgna, . . . relative alla sistemazione dell' Adige, etc. 1885.
- LORIMER, J. A concise Essay on Magnetism; with an account of the declination and inclination of the magnetic needle, etc.
Lond. 1795. 4to.
- LORING, A. E. A Hand-Book of the Electro-Magnetic Telegraph.
New York, 1878. 8vo.
- LORING, C. H., and EMERY, C. E. Report of the trial of the Steam Machinery of the United States revenue steamer "Gallatin." Tract. 4to. vol. 80.
Washington, 1875. 4to.
- LORIOT, A. J. Mémoire sur une découverte dans l'art de bâtir, . . . dans lequel l'on rend publique . . . la méthode de composer un ciment ou mortier propre à une infinité d'ouvrages, etc. Tract. 8vo. vol. 149.
Paris, 1774. 8vo.
- LORNE, *Marquis of* [JOHN DOUGLAS SUTHERLAND]. The Canadian North-West: a Speech, etc. Tract. 8vo. vol. 398.
Ottawa, 1881. 8vo.
- LOS ANGELES. Report of the Board of Engineers upon the disposal of the Sewage of Los Angeles City and its Sewer System. Tract. 8vo. vol. 490.
Los Angeles, 1889. 8vo.
- LOSE, F. The Terra-cotta Architecture of N. Italy . . . Edited by L. Gruner. 1867. *See* OTTOLINI, V., and LOSE, F.
- LOSEBY, E. T. Improvements in Time-keepers. Tract. 8vo. vol. 100.
[Lond. 1852.] 12mo.
- On the Phenomena of Meteors. Tract. 8vo. vol. 165.
Leicester, [1867 ?] 12mo.
- LOSSEN, K. A. Reinigung und Entwässerung Berlins. 2 vols. (Atlas of plates.)
Berlin, 1879. 8vo. and folio.
- LOSSIGNOL, E. Les accidents de mer. Nécessité d'une réforme dans la police maritime. Tract. 8vo. vol. 177.
Paris, 1860. 8vo.
- Navires en fer à voiles. Étude commerciale. Tract. 8vo. vol. 177.
Paris, 1866. 8vo.
- LOTHROP, G. V. N. A Plea for Education as a public duty. Tract. 8vo. vol. 311.
Michigan, 1878. 8vo.
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Lond. 1811. 8vo.
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Lond. 1844. 8vo.
- Remarks on the Construction of Hot-houses. Lond. 1817. 4to.

- LOUGHBOROUGH.** Loughborough Local Board Bill. Minutes of evidence and minutes of speech. *Lond.* 1886. folio.
- LOUGHRIDGE, R. H.** Report on Cotton Production in the Indian Territory, with a brief Description of the Agricultural Features of a portion of the country. [*U.S.A. 10th Census.* Vols. V. and VI.] *Washington*, 1884. 4to.
- Report on Cotton Production in the State of Missouri, with a brief description of the Agricultural Features of the State in General, and especially of the Cotton-producing Counties. [*U.S.A. 10th Census.* Vols. V. and VI.] *Washington*, 1884. 4to.
- Report on the Cotton Production of the State of Arkansas, with a discussion of the general agricultural features of the State. [*U.S.A. 10th Census.* Vols. V. and VI.] *Washington*, 1884. 4to.
- Report on the Cotton Production of the State of Georgia, with a description of the general agricultural features of the State. [*U.S.A. 10th Census.* Vols. V. and VI.] *Washington*, 1884. 4to.
- Report on the Cotton Production of the State of Texas, with a discussion of the general agricultural features of the State. [*U.S.A. 10th Census.* Vols. V. and VI.] *Washington*, 1884. 4to.
- LOUIS, H.** A Handbook of Gold Milling. *Lond.* 1894. 8vo.
- LOUISVILLE AND NASHVILLE RAILROAD.** Annual reports. 1873(–75). *Louisville*, 1873–76. 8vo.
- Iron Mountains and Coal Basins of Alabama. *Tract.* 8vo. vol. 253. *Louisville*, 1875. 8vo.
- LOUISVILLE BRIDGE COMPANY.** Third and fourth annual reports. *Louisville*, 1872. 8vo.
- LOUISVILLE WATER COMPANY.** Contract and Specification for Pumping Engine No. 3, and three Fire-box Tubular Boilers. *Louisville*, 1887. 4to.
- LOVE, E. G.** Pavements and Roads; their construction and maintenance. *New York*, 1890. 8vo.
- LOVE, G. H.** Des diverses résistances et autres propriétés de la fonte, du fer et de l'acier, etc. *Paris*, 1859. 8vo.
- Essai sur l'identité des agents qui produisent le son, la chaleur, la lumière, l'électricité, etc. *Paris*, 1861. 8vo.
- Mémoire sur la loi de résistance des conduits intérieurs à fumée dans les chaudières à vapeur, déduite des expériences de M. W. Fairbairn. *Tract.* 8vo. vol. 126. *Neuilly*, 1859. 8vo.
- Mémoire sur la résistance du fer et de la fonte et l'emploi de ces métaux dans les constructions, basé principalement sur les recherches expérimentales les plus récentes faites en Angleterre. *Tract.* 8vo. vol. 160. *Paris*, 1852. 8vo.
- Observations sur les prescriptions administratives réglant l'emploi des métaux dans les appareils et constructions intéressant la sécurité publique. *Tract.* 8vo. vol. 126. *Paris*, 1859. 8vo.

- LOVE, H. D., *Capt.* Hydraulics. *Madras*, 1887. 8vo.
(College of Engineering Manual.)
- LOVE, J. Geodæsia: or, the art of surveying and measuring of land made easie, etc. *Lond.* 1688. 8vo.
- LOVEDAY, R. K. Map of the Lydenburg Goldfields. *Pretoria*, 1883. folio.
- LOVEGROVE, J. [General and Annual Reports on the works executed by the Board of Works for the Hackney District, 1860, 71, 72, 74, 77, etc.] *Tract.* 8vo. vols. 124 and 247.
Lond. 1860, etc. 8vo.
- Report on the Southern Portion of the Marsh Sewer from Lea Bridge Road to Hackney Wick. *Tract.* 8vo. vol. 236.
Lond. 1874. 8vo.
- Report on the system of ventilation at present in action over the sewers in De Beauvoir Town and Dalston Wards, etc. *Tract.* 8vo. vol. 156.
Lond. 1866. 8vo.
- Report on the use of a Steam Roller in the repair of roads. *Tract.* 8vo. vol. 247. *Lond.* [1871?] 8vo.
- LOVELACE, *Earl of* [WILLIAM KING-NOEL]. On Climate in connection with Husbandry, with reference to a work entitled "Cours d'Agriculture, par le comte de Gasparin." *Tract.* 8vo. vol. 84.
Lond. 1848. 8vo.
(From the Journal of the Royal Agricultural Society of England, Vol. 9.)
- On Harbours of Refuge. *Tract.* 8vo. vol. 502.
(From Min. Proc. Inst. C.E.) *Lond.* 1849. 8vo.
- On the construction of a Collar Roof . . . at East Horsley Park. *Tract.* 8vo. vol. 501. *Lond.* 1849. 8vo.
(From Min. Proc. Inst. C.E.)
- Quételet, du système social. [A review.] *Tract.* 8vo. vol. 85.
[*Lond.* 1850?] 8vo.
- Ramée; architecture du moyen âge. [A review] *Tract.* 8vo. vol. 85. [*Lond.* 1850?] 8vo.
- Review of the Agricultural Statistics of France; with a notice of the works of MM. Rubichon, Mounier, and Passy, respecting its produce, and the condition of its rural population. *Tract.* 8vo. vol. 84. *Lond.* 1848. 8vo.
- Review of the work of Messrs. Rubichon and Mounier, "De l'action de la noblesse et des classes supérieures dans les sociétés modernes," and of the memoir of M. Benoiton de Châteauneuf "Sur l'extinction des familles nobles en France." *Tract.* 8vo. vol. 85. *Lond.* 1848. 8vo.
- Villemain: littérature du moyen âge. [A review.] *Tract.* 8vo. vol. 85. [*Lond.* 1850?] 8vo.
- LOVELAND, R. L. See HALL, R. G. Rights of the Crown . . . in the Sea Shores of the Realm. 2nd edition by R. L. Loveland. 1875.

- LOVELL, J. W., *Lieut.-Col.* Lectures On Gun Cotton for Blasting purposes. *Tract.* 8vo. vol. 243. Chatham, 1864. 8vo.
- LOW, S., and Co. The British Catalogue. See ANONYMOUS.—London Catalogue.
- LOW, S., *jun.* The Charities of London . . . New edition. 1863 (1874, 1894–5). Lond. 1863–94. 8vo.
- LOW, W. Channel Tunnel. Ventilation of the Channel Tunnel Railway after completion. *Tract.* 4to. vol. 79. Wrexham, 1873. 4to.
- Letter to . . . Lord John Russell, explanatory of a financial System for extending Railways in Ireland, etc. *Tract.* 8vo. vol. 82. Lond. 1850. 8vo.
- LOW, W., and THOMAS, G. Considerations and Suggestions respecting, 1st. The Regeneration of Asiatic Turkey. 2nd. The Restoration of the Turkish Empire. 3rd. The Reformation of Turkish Finance. *Tract.* 8vo. vol. 267. Wrexham, 1876. 8vo.
- The proposed England and India Railway. *Tract.* 8vo. vol. 210. Lond. 1871. 8vo.
- LOWE, C. Four National Exhibitions in London and their Organiser. Lond. 1892. 8vo.
- LOWE, J. Earthwork Table for parliamentary and working sections of Railways. *Tract.* 8vo. vol. 377. Lond. 1846. 8vo.
- LOWE, R. The Improved Patent Wood Block Flooring. *Tract.* 8vo. vol. 489. Bolton, 1889. 8vo.
- LOWELL, *Mass.* Report on a supply of water for the city of Lowell. *Tract.* 8vo. vol. 231. Lowell, 1869. 8vo.
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- LOWER, M. A. A Survey of the Coast of Sussex, made in 1587, with a view to its defence against Foreign Invasion and especially against the Spanish Armada. Lewes, 1870. 4to.
- LOWER THAMES VALLEY MAIN SEWERAGE BOARD.
Notice to C. J. Corbett, Esq., 15th December, 1879. [MS.] 1879. folio.
- Petition to the Local Government Board under the Public Health Act, 1875. Session 1879–80. [MSS.] Lond. 1879–80. folio.
- See also :—THAMES VALLEY.
- LOWESTOFT. Ravine Bridge, Lowestoft. R. M. Parkinson, engineer. (From the Engineer.) Lond. 1887. 4to.
- LOWNDES, C. S. The Engineer's Handbook. Lond. 1860. 8vo.
- LOWNDES, W. T. The Bibliographer's Manual of English Literature. New edition. Revised by H. G. Bohn. 4 vols. Lond. 1871. 8vo.

- LOWRY, R. Best Means of supplying the city of Carlisle with Coals. *Tract. 8vo. vol. 47.* Carlisle, 1807. 8vo.
- LOWWOOD. Report on an Explosion in an Incorporating Mill at Lowwood Gunpowder Works on the 6th September, 1887. Lond. 1887. folio.
- LOYAL NATIONAL REPEAL ASSOCIATION. First Report of the Sub-committee of the . . . Association on the Borough Franchise. *Tract. 8vo. vol. 63.* Dublin, 1844. 8vo.
- Report of the committee of the . . . Association upon the commissioner's report on the ordnance memoir of Ireland. *Tract. 8vo. vol. 63.* Dublin, 1844. 8vo.
- Report of the Sub-committee of the Loyal National Repeal Association, to which was referred the subject of the fiscal relations between Great Britain and Ireland. *Tract. 8vo. vol. 63.* Dublin, 1844. 8vo.
- LUARD, C. E., *Maj.-Gen.* Stone: how to get it and how to use it. Lond. 1890. 8vo.
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- LUARD, BEEDHAM, and Co. Remarks on Caen and Aubigny Stone, &c.: also, extracts from papers, and reports, etc. *Tract. 8vo. vol. 88.* Lond. 1850. 8vo.
- LUBBOCK, Sir J. The Forms of Seedlings: the causes to which they are due. *Tract. 8vo. vol. 426.* Lond. 1886. 8vo.
- LUBBOCK, Sir J. W. Account of the "Traité sur le flux et reflux de la mer," of D. Bernoullis, and a treatise on the Attraction of Ellipsoids. *Tract. 8vo. vol. 190.* Lond. 1830. 8vo.
- An elementary Treatise on the Tides. *Tract. 8vo. vol. 190.* Lond. 1839. 8vo.
- On the Determination of the Distance of a Comet from the Earth, and the elements of its orbit. New edition. *Tract. 8vo. vol. 190.* Lond. 1835. 8vo.
- On the Determination of the numerical Values of the Co-efficients in any series consisting of series and co-series of multiples of a variable angle. *Tract. 8vo. vol. 190.* Lond. 1848. 8vo.
- On the Heat of Vapours and on Astronomical Refractions. *Tract. 8vo. vol. 190.* Lond. 1840. 8vo.
- On Shooting Stars. *Tract. 8vo. vol. 193.* [Lond. 1848-49.] 8vo.
- On the Theory of the Moon, and on the perturbations of the planets. New edition. 9 pts. *Tract. 8vo. vols. 190 and 193.* (Parts 2, 3 and 7 wanting.) Lond. 1834-50. 8vo.
- LUBERSAC, — DE, *Abbé.* Discours sur les monumens publics de tous les âges et de tous les peuples connus, etc. Paris, 1775. folio.

- LUBIN, D. A novel Proposition: revolutionizing the Distribution of Wealth. Farm Products moved as mail matter at a uniform rate for all distances, *etc.* *Tract.* 8vo. vol. 513.
Sacramento, 1893. 8vo.
- A novel Proposition: showing how the Rate of Wages . . . and the demand for Skilled Labour is influenced by the cost of transportation on farm products, *etc.* *Tract.* 8vo. vol. 513.
Sacramento, 1894. 8vo.
- LUC, J. A. DE. Recherches sur les modifications de l'atmosphère. 2 vols. *Genève*, 1772. 4to.
- LUCAS, F. Étude historique et statistique sur les voies de communication de la France d'après les documents officiels.
Paris, 1873. 8vo.
- Traité pratique d'électricité à l'usage des ingénieurs et des constructeurs, *etc.* *Paris*, 1892. 8vo.
- LUCAS, J. Horizontal wells: a new application of geological principles to effect the solution of the problem of supplying London with pure water. *Lond.* 1874. 4to.
- Hydrogeological Survey [of parts of Middlesex, Hertfordshire, Essex and Surrey]. 2 pts. *Lond.* 1877-78. 4to.
- Kalm's account of his Visit to England on his way to America in 1748. 1892. See KALM, P.
- Mines and Mineral Statistics of New South Wales, and notes on the Geological Collection of the Department of Mines.
Sydney, 1875. 8vo.
- Report on the prospects of Boring for Water in Rugley Wood and at Thorntree Well. *Tract.* 8vo. vol. 447.
Alnwick, 1885. 8vo.
- Report to Lieut.-Colonel W. G. Dawkins, on the prospect of finding Coal under the Estate of Over Norton, Oxfordshire (in the Parish of Chipping Norton). *Tract.* 8vo. vol. .
Lond. 1891. 8vo.
- What the Ratepayers really want the Government to do for London Water Supply. *Tract.* 8vo. vol. 326. *Lond.* 1880. 8vo.
- LUCCHESINI, A. La vita di G. Stephenson. *Tract.* 8vo. vol. 196.
Firenze, 1869. 8vo.
- LUCE, R. Electric Railways and the Electric Transmission of Power described in plain terms. *Boston, Mass.*, 1886. 8vo.
- LUCKHARDT, L. A few words on the present state of the Manufacture of Gunpowder, *etc.* *Tract.* 8vo. vol. 415.
Frankfort, [1886?] 8vo.
- LÜDERS, F. W. W. Betænkning afgiven af den Kommission angaaende en Tilflugts- og Handelshavn i det nordlige Kattegat. (Atlas.) *Kjöbenhavn*, 1878. 4to. and folio.
- Den nye Bro til Christianshavn Knippelsbro.
Kjöbenhavn, [1872.] folio.

- LUDLAM, A. Essay on the Cultivation and Acclimatization of Trees and Plants. *Dunedin*, 1865. 8vo.
- LUDLOW, W. Report of a Reconnaissance of the Black Hills of Dakota. 1875. *See* DAKOTA.
- LÜHRIG COAL AND ORE DRESSING COMPANY. [Description of the Lührig Vanner or Percussion Table: and list of Ore Dressing Plants.] *Tract. 4to. vol.* . [Lond. 1893.] 4to.
- LUIGGI, L. Apparatî idraulici pel trasbordo e manutenzione delle merci. *Genova*, 1883. 8vo.
- Methods . . . for rendering Canals water-tight. 1892. *See* BOMPIANI, G., and LUIGGI, L.
- La nuova ferrovia elettrica sotterranea di Londra. Note di viaggio. *Tract. 8vo. vol.* . *Roma*, 1891. 8vo.
- Nuovi perfezionamenti negli apparecchi dei fari. *Tract. 8vo. vol.* . 1893. 8vo.
- Nuovi tipi di gru idrauliche mobili. *Tract. 8vo. vol. 410.* *Roma*, 1885. 8vo.
- I porti di Hull, di Grimsby e di Goole sul fiume Humber. *Roma*, 1890. 8vo.
- I porti di Liverpool e di Birkenhead sulla Mersey. *Roma*, 1889. 8vo.
- Il porto e i docks di Londra. *Roma*, 1882. 8vo.
- Il porto e i docks di Southampton. *Roma*, 1883. 8vo.
- Recent Breakwaters and Sea Defences in Italy. [2nd Int. Mar. Congr.] [Lond. 1893.] 8vo.
- Relazione sui lavori del quarto congresso internazionale di navigazione interna, etc. 1891. *See* BOMPIANI, G., and LUIGGI, L.
- Il servizio merci sulli ferrovie Inglesi. *Tract. 8vo. vol. 482.* *Roma*, 1888. 8vo.
- Su alcune macchine per la preparazione del calcestruzzo, etc. 1889. *See* BOMPIANI, G., and LUIGGI, L.
- Sull' ordinamento del porto di Anversa. *Tract. 8vo. vol. 436.* *Roma*, 1886. 8vo.
- Il Tilbury dock a Londra. *Tract. 8vo. vol. 436.* *Roma*, 1886. 8vo.
- LUIGGI, L., and BORGATTI, E. Hydraulic Installations in the Port of Genoa. [2nd Int. Mar. Congr.] *Lond.* 1893. 8vo.
- Sull' impianto di apparecchi idraulici nel porto di Genova. *Roma*, 1888. 8vo.
- LUMLEY, W. G. The new Sanitary Laws: namely, The Public Health Act, 1848, the Public Health Act, 1858, and the Local Government Act, 1858. *Lond.* 1859. 8vo.

- LUMLEY, W. G.—*continued*. The Rivers Pollution Prevention Act, 1876, and the Alkali Acts, 1863, 1874, annotated with introduction and index. *Tract. 8vo. vol. 378. Lond. 1876. 8vo.*
- LUMLEY, W. G., and E. The Public Health Act, 1875, annotated, etc. *Lond. 1876. 8vo.*
- LUNARDI, V. An Account of the first Aërial Voyage in England. *Tract. 8vo. vol. 408. Lond. 1784. 8vo.*
- LUNE, *River*. Amended Act for the Navigation of the River Lune. *Lond. 1807. folio.*
- LÜNEBURG.—*Naturwissenschaftlicher Verein. Jahreshefte. Vol. 7. Lüneburg, 1878. 8vo.*
- LUNELL, J. E. Hints for the Improvement of the River Fromme. *Tract. 8vo. vol. 88. Bristol, 1845. 8vo.*
- LUNGE, G. A theoretical and practical Treatise on the Manufacture of Sulphuric Acid and Alkali, etc. 3 vols. *Lond. 1879–80. 8vo.*
- A Treatise on the Distillation of Coal-Tar and Ammoniacal Liquor and the separation from them of valuable products. *Lond. 1882. 8vo.*
- Coal-Tar and Ammonia. Being the second and enlarged edition of "A Treatise on the Distillation of Coal-Tar," etc. *Lond. 1887. 8vo.*
- LUPTON, A. A few Observations on Winding Engines, etc. *Tract. 8vo. vol. 480. [1875?] 8vo.*
- Mining : an elementary treatise on the getting of minerals. *Lond. 1893. 8vo.*
- LÜRMANN, F. W. [A collection of pamphlets relating to Gas-Generating Furnaces.] 1880–85. 8vo.
- Ueber Schlackentransport. [*Düsseldorf, 1884.*] 8vo.
- LUSHINGTON, H. The Broad and the Narrow Gauge. *Tract. 8vo. vol. 294. Westminster, 1846. 8vo.*
- Fallacies of the Broken Gauge. Mr. Lushington's arguments in favour of Broad Gauge and Breaks of Gauge refuted . . . By a Fellow of Two Royal Societies. 2nd edition. *Tract. 8vo. vols. 70 and 461. Lond. 1846. 8vo.*
- LUST, F. Notice de l'horloge automatique, etc. [1882?] See TILLIÈRE, C., and LUST, F.
- LUTON. Corporation of Luton, Engineer and Surveyor's Department. Annual Report, 1890, by E. J. Lovegrove. *Luton, 1891. 8vo.*
- LUXEMBURG, *Province of*. Rapport sur la situation de l'industrie minérale et métallurgique . . . pendant les années 1879–82. *Arlon, 1880–83. 8vo.*
- LUXEMBURG RAILWAY. Great Luxembourg Railway. Report of the directors. *Tract. 8vo. vol. 77. Lond. 1846. 8vo.*

- LYDEKKER, R. Catalogue of the remains of Pleistocene and Prehistoric Vertebrata contained in the Geological Department of the Indian Museum, Calcutta. *Calcutta*, 1886. 8vo.
- Catalogue of the remains of Siwalik Vertebrata contained in the Geological Department of the Indian Museum, Calcutta. 2 pts. *Calcutta*, 1885, 86. 8vo.
- LYELL, Sir C. Address delivered at the Anniversary Meeting of the Geological Society of London, . . . 1851. *Tract. 8vo. vol. 97.*
Lond. 1851. 8vo.
- The Geological Evidence of the Antiquity of Man. 2nd edition. *Lond.* 1863. 8vo.
- Elements of Geology ; or, the ancient changes of the earth and its inhabitants, . . . 6th edition. *Lond.* 1865. 8vo.
- Principles of Geology. 2nd edition. 3 vols. *Lond.* 1833. 8vo.
- — 6th edition. 3 vols. *Lond.* 1840. 8vo.
- — 9th and . . . revised edition. *Lond.* 1853. 8vo.
- — 10th and . . . revised edition. 2 vols. *Lond.* 1867. 8vo.
- The Students' Elements of Geology. *Lond.* 1871. 8vo.
- Travels in North America ; with Geological Observations on the United States, Canada, and Nova Scotia. 2 vols. *Lond.* 1845, 55. 8vo.
- (Vol. 1 is of the second edition.)
- See HASWELL COLLIERIES. Copy of Report by Messrs. Lyell and Faraday on an Explosion. 1845.
- LYLE, D. A., *Capt.* Report on the trial of Gruson's Chilled Cast-iron Armor at Spezia, Italy, etc. 1886. *Tract. 8vo. vol. 105.*
Washington, 1887. 4to.
- LYMAN, B. S. Geological Survey of Hokkaido. A general report on the Geology of Yesso. *Tract. 8vo. vol. 390.*
Tokei, 1877. 8vo.
- Geological Survey of Japan. Reports of Progress for 1878 and 1879. *Tract. 8vo. vol. 379.*
Tokei, 1879. 8vo.
- Preliminary Report on the first season's work of the Geological Survey of Yesso. *Tract. 8vo. vol. 390.*
Tokei, 1874. 8vo.
- Geological Survey of Hokkaido. Report of Progress of the Yesso Geological Surveys for 1875. *Tract. 8vo. vol. 379.*
Tokei, 1877. 8vo.
- A Review of the "Atlas of the Western Middle Anthracite Field." *Tract. 8vo. vol. 390.*
[1884.] 8vo.
- Shippen and Wetherill Tract. *Tract. 8vo. vol.*
Philadelphia, 1893. 8vo.
- Topography of the Punjab Oil Region. *Tract. 4to. vol. 69.*
Philadelphia, 1872. 4to.
- LYNAM, J. Letters on the Arterial or River Drainage, as designed and executed by the Commissioners of Public Works in Ireland. *Tract. 8vo. vol. 282.*
Dublin, 1860. 8vo.

- LYNAM, J.—*continued*. On the River Shannon, its present state, etc. *Tract*. 8vo. vol. 309. *Lond*. 1878. 8vo.
- See SHANNON, *River*. Rivers Shannon and Suck. Copy of Report by J. Lynam, etc. 1867.
- LYND, W. The Practical Telegraphist. *Lond*. [1884.] 8vo.
- LYNDE, F. C. Descriptive illustrated catalogue of the sixty-eight competitive designs for the Great Tower for London. *Tract*. 8vo. vol. 493. *Lond*. 1890. 8vo.
- LYNDE, J. H. Apparatus for the Automatic Extinction of Fires. *Tract*. 8vo. vol. 422. *Manchester*, 1886. 8vo.
- On Street Tramways and Cars. *Tract*. 8vo. vol. 266. *Manchester*, 1874. 8vo.
- LYNE, F. Tribunals of Commerce: a letter to the bankers of London, reviewing the . . . movement in favour of tribunals of commerce. *Tract*. 8vo. vol. 116. *Lond*. 1854. 8vo.
- LYNN, *Mass*. Report of the Committee on Drainage. *Tract*. 8vo. vol. 438. *Lynn*, 1884. 8vo.
- Report on the introduction of Water for the city of Lynn, etc. *Tract*. 8vo. vol. 204. *Lynn, Mass.*, 1870. 8vo.
- LYNN, *Norfolk*. See KING's LYNN.
- LYNN, T. Supplement to the Horary Tables, for finding the time by inspection, to facilitate the operations for obtaining the latitude and longitude at sea, etc. Stereotype edition. *Lond*. 1827. 4to.
- Table containing the Latitudes of places, with their Longitudes from the meridian of the Royal Observatory at Greenwich, etc. *Lond*. 1824. 8vo.
- LYON, C. L. The History of St. Andrews, ancient and modern. *Edinburgh*, 1838. 8vo.
- LYONS. Rapport sur le projet de dérivation et de distribution d'eaux de source à Lyon. *Lyon*, 1843. 8vo.
- Résumé des observations de la Commission hydrométrique, 1855–65. (Vol. for 1861 wanting.) *Lyon*, 1855–65. 8vo.
- LYONS, J., *jun*. A Treatise of Fluxions. *Tract*. 8vo. vol. 26. *Lond*. 1758. 8vo.
- LYONS, T. A. The Magnetism of Iron and Steel Ships: an explanation of the various ways in which it affects the compass. *Washington*, 1884. 8vo.
- LYSAGHT, J., *Limited*. [Book of Illustrations of Railway Bridges, Railway Sheds, etc.] [1888.] folio.
- LYSTER, A. G. Dredging Operations on the Mersey Bar. [2nd *Int. Mar. Congr.*] [*Lond*. 1893.] 8vo.
- Specification [for] improvements in Portable Elevators for Grain and like Cargo. 1885. See LYSTER, G. F., and A. G.

- LYSTER, G. F. [Letter on the subject of improving the working conditions of certain of the Graving Docks on the Mersey Dock Estate.] *Tract. folio. vol. 36.* [Liverpool, 1883.] folio.
- Specification [for] improvements in appliances for facilitating the Discharge of Grain and Bulk Cargo from Ships. *Tract. 4to. vol. 117.* Lond. 1880. 8vo.
- LYSTER, G. F., and A. G. Specification [of] improvements in Portable Elevators for Grain and like cargo. *Tract. 4to. vol. 117.* Lond. 1885. 8vo.

M.

- MAASTRICHT.—*Hoogere Burgerschool*. Algemeen programma. *Maastricht*, [] 8vo.
- (Programma der lessen vor het schooljaar 1867–68.) *Maastricht*, 1867–68. 8vo.
- M'ADAM, J. L. Memorial on the subject of Turnpike Roads. *Tract*. 4to. vol. 4. [1820?] 4to.
- Remarks upon the present system of Road Making, etc. *Tract*. 8vo. vol. 4. *Bristol*, 1816. 8vo.
- — Third edition, with appendix. *Lond.* 1820. 8vo.
- — Sixth edition, with appendix. *Lond.* 1822. 8vo.
- Report from select committee on McAdam's Petition on Roads. *Lond.* 1823. folio.
- MACADAM, S. On Flour-mill Fire-Explosions. *Tract*. 8vo. vol. *Edinburgh*, 1874. 8vo.
- McALPINE, W. J. Address . . . on the extent of the products of the Food producing interior of the United States. *Tract*. 8vo. vol. 240. *New York*, 1873. 8vo.
- Address to the American Society of Civil Engineers. *Tract*. 8vo. vol. . 1868. 8vo.
- The Foundations of the New Capitol at Albany, N.Y. *Tract*. 8vo. vol. 485. [New York, 1874.] 8vo.
- A Lecture on Foundations. *Tract*. 8vo. vol. 209. *Albany*, 1868. 8vo.
- Modern Engineering : a lecture, etc. *New York*, 1874. 8vo.
- The New York Arcade Railway, as projected, compared with the Underground Railways of London. *Tract*. 4to. vol. 89. *New York*, 1884. 4to.
- Proceedings of the Oswego Board of Trade on the subject of transportation Routes from the West to the Sea Board. *Tract*. 8vo. vol. 237. *Oswego*, 1873. 8vo.
- A Report for Supplementing the Croton Water Supply to the City of New York from the Ramapo District. *Tract*. 8vo. vol. 350. *New York*, 1882. 8vo.
- A report on supplying the City of Oswego with Water, etc. *Tract* 8vo. vol. 151. *Oswego*, 1866. 8vo.
- Report on the Improvement of the Harbour of Montreal, etc. 1857. See CHILDE, J., McALPINE, W. J., and KIRKWOOD, J. P.
- Report to the . . . City Council of Baltimore on the matter of the Purification of the Waters of the Upper Harbor or Basin. *Tract*. 8vo. vol. 236. *Baltimore*, 1873. 8vo.

- MCALPINE, W. J.—*continued*. Report to the Water Commissioners of the City of Hudson. *Tract*. 8vo. vol. 231. Hudson, 1872. 8vo.
- Reports and Plans for a Supply of Water for the City of Norfolk. *Tract*. 8vo. vol. 204. Norfolk, 1871. 8vo.
- A Water Supply for the City of Troy: a report. *etc*. *Tract*. 8vo. vol. 249. Troy, 1872. 8vo.
- W. J. McAlpine. [An obituary notice.] *Tract*. 8vo. vol. [New York, 1892.] 8vo.
(From Proc. Am. Soc. C.E., 1892.)
- MACARTHUR, A. Education in its relation to Manual Industry. New York, 1884. 8vo.
- MACARTHUR, J. G., and JACKSON, J. Lubrication and Lubricating Oils. *Tract*. 8vo. vol. Glasgow, 1886 and 1891. 8vo.
- MACASSEY, L. L. Belfast Water Works. Report as to the advisability of filtering the water now supplied, *etc*. *Tract*. 8vo. vol. 296. Belfast, 1877. 8vo.
- Handbook for the use of Solicitor and Engineers engaged in promoting Private Acts of Parliament and Provisional Orders. Lond. 1887. 8vo.
- Hints on the Water Supply of small towns and villages. Lond. 1877. 8vo.
- The proposed Channel Tunnel, and through trains between Edinburgh, Glasgow, Manchester, Belfast, and Londonderry. *Tract*. 8vo. vol. 492. Glasgow, 1890. 8vo.
- MACASSEY, L. L., and STRAHAN, J. A. The Law relating to Civil Engineers, Architects, and Contractors. Lond. 1890. 8vo.
- MACAULAY, J. S. Description of Chasseloup de Laubat's System of Fortification. [By J. S. Macaulay.] 1833. See CHASSELOUP DE LAUBAT, F. DE.
- MACAULAY, T. B., *Lord*. The speech of the Right Hon. T. B. Macaulay on Mr. Sergeant Talfourd's Bill for the Extension of Copyright, in the House of Commons, Friday, February 5, 1841. *Tract*. 8vo. vol. 63. Lond. 1841. 8vo.
- MACAULAY, Z. Macaulay's Station Map of the Metropolitan Railways. Lond. 12mo.
- Macaulay's Station Map of the Railways in Great Britain. Lond. [1862?] 8vo.
- MACBAY, W., *Capt*. The United Kingdom really United: how to obtain good and cheap beef and unfailing crops. *Tract*. 8vo. vol. 155. Lond. 1866. 8vo.
- MCBEAN, S. England, Palestine, Egypt and India connected by a Railway System. Lond. 1876. 8vo.
- Proposed Inverness and Glasgow Railway. 2 pts. *Tracts*. 8vo. vols. 234 and 260. Westminster, 1874–75. 8vo.

- MCBEAN, S., and MACDONALD, D. G. F. Metropolitan Pure Sea Water Household Supply. *Tract. folio. vol. 26.*
Lond. 1878. folio.
- M'CALLUM, D. C. M'Callum's Inflexible Arched Truss Bridge explained and illustrated. *Tract. 8vo. vol. 137.*
New York, 1859. 8vo.
- Report on United States Military Railroads, 1861-66.
Tract. 8vo. vol. 199. Washington, 1866. 8vo.
- MACCALLUM, J. B. Borough of Blackburn. Details of House Drainage. *Tract. 8vo. vol. 496. Blackburn, 1890. 8vo.*
- House Sanitation, etc. *Tract. 8vo. vol. .*
Manchester, 1891. 8vo.
- Some Particulars of the Municipal and Sanitary Works of Blackburn.
Blackburn, 1885. 8vo.
- MCALLUM, T. S. Tidal Action as a Source of Power. *Tract. 8vo. vol. .*
Manchester, 1891. 8vo.
- M'CALMONT, R. Grand Trunk Railway Company of Canada. Victoria Bridge. Letter to the shareholders, with a report by Mr. Liddell, on the best and cheapest mode of bridging the St. Lawrence at Montreal. Together with counter-reports by Messrs. R. Stephenson, I. K. Brunel, E. Clark, etc. *Tract. 4to. vol. 42.*
Lond. 1856. 4to.
- MACCHESNEY, C. E. Notes on the Birds of Fort Sisseton, Dakota Territory. *Tract. 8vo. vol. 481. Washington, 1879. 8vo.*
 (From the "Bulletin of the U.S. Geol. and Geogr. Survey.")
- Notes on the Mammals of Fort Sisseton, Dakota, annotated by Dr. E. Coues. *Tract. 8vo. vol. 474. Washington, 1878. 8vo.*
- M'CLEAN, J. R., and STILEMAN, F. C. Reply to Mr. Brunlees' Report to the Directors of the Bristol Port & Channel Dock Co. re the proposed Portishead Dock. *Tract. folio. vol. 25.*
Westminster, 1871. folio.
- M'CLEERY, J. Review of a Project of J. O. Woodhouse, Esq., for keeping Lough Neagh at its usual summer level, and for improving the navigation of the lower Bann. *Belfast, 1836. 12mo.*
- McCLELLAN, G. B., *Capt., U.S.A.* Report of G. B. McClellan as one of the officers sent to the seat of war in Europe in 1854-56.
Washington, 1857. 4to.
- MACCLESFIELD, *Earl of*, [GEORGE PARKER]. Remarks upon the solar and the lunar years, the cycle of 19 years, commonly called the golden number, the epact, and a method of finding the time of Easter, etc. *Tract. 8vo. vol. 33. Lond. 1751. 8vo.*
- Speech in the House of Peers on Monday the 18th day of March 1750, at the second reading of the Bill for Regulating the Commencement of the Year, etc. *Tract. 8vo. vol. 33.*
Lond. 1751. 8vo.

- MACCLESFIELD CANAL. Act for making . . . a navigable canal from the Peak Forest Canal, in the township of Marple . . . to join the Canal Navigation from the Trent to the Mersey, at or near Harding's Wood Lock, *etc.* [Lond. 1826.] folio.
- MACCOLL, H. On the Shafting of Screw Steamers. *Tract.* 8vo. vol. 487. Glasgow, 1887. 8vo.
- On the Strength of Cylindrical Boiler Shells. *Tract.* 8vo. vol. 487. Glasgow, 1875. 8vo.
- MCCONNELL, J. E. Letters-patent to J. E. McConnell . . . for the Invention of "Improvements in locomotive engines." *Tract.* 4to. vol. 61. Lond. 1852. 4to.
- See also:—THORNTON, S., and MCCONNELL, J. E.
- MCCONNOCHIE, J. A. The Surrey Commercial Docks. [2nd Int. Mar. Congr.] [Lond. 1893.] 8vo.
- MACCORD, C. W. Kinematics: a treatise on the modification of motion as affected by the forms and modes of connection of the moving parts of machines. New York, 1883. 8vo.
- A Practical Treatise on the Movement of Slide Valves by Eccentrics. New York, 1873. 4to.
- MCCORQUODALE AND CO. The Railway and Commercial Gazetteer of England, Scotland and Wales, *etc.* 9th edition, revised. Lond. 1882. 8vo.
- — — 12th edition. Lond. 1894. 8vo.
- MCCOSH, J. On a new Floating Breakwater. *Tract.* 8vo. vol. 251. Lmd. 1874.
- A proposal for a floating Harbour of Refuge. *Tract.* 8vo. vol. 345. Edinburgh, 1882. 8vo.
- MCCOY, F. Natural History of Victoria. Prodomus of the Zoology of Victoria, *etc.* Vols. I. and II. Melbourne, 1885. 8vo.
- MACCULLAGH, J. On the Surfaces of the Second Order. *Tract.* 8vo. vol. 189. [Dublin, 1850?] 8vo.
- MCCULLOCH, J. R. A descriptive and statistical account of the British Empire . . . 4th edition, revised. (Appendix,) Lond. 1854. 8vo.
- — A dictionary . . . of Commerce and Commercial Navigation; with a supplement. New edition. 1 vol. in 2 pts. Lond. 1837. 8vo.
- — — — New edition, with . . . corrections, *etc.* Lond. 1860. 8vo.
- — — — New edition, revised . . . and edited by H. G. Reid. Lond. 1867. 8vo.
- — — — New edition, revised . . . by H. G. Reid. Lond. 1880. 8vo.
- MCCULLOCH, R. S. Treatise on the Mechanical Theory of Heat and its Applications to the Steam Engine, *etc.* New York, 1876. 8vo.

- M'CULLOH, R. S. A Manual containing Tables to be used by the Revenue Officers of the United States, *etc.*
[Washington,] 1849. 8vo.
- Report of R. S. M'Culloh's operations at the Mint of the United States, in refining California gold by his Zinc Method.
Washington, 1852. 8vo.
- McDERMOTT, F. The Development of Railways in England.
Tract. folio. vol. 42. [Lond.] 1888. folio.
- The Life and Work of Joseph Firbank, J.P., D.L., Railway Contractor.
Lond. 1887. 8vo.
- The Railway System of London. *Tract. 8vo. vol.* .
Lond. 1891. 8vo.
- McDERMOTT, W., and DUFFIELD, P. W. Losses in Gold Amalgamation . . . Second edition.
Lond. 1890. 8vo.
- MACDONALD, A. On Disasters in Mines. *Tract. 8vo. vol. 343.*
Lond. 1878. 8vo.
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- MACDONALD, D. G. F. Metropolitan Pure Sea Water Household Supply. 1878. See McBEAN S., and MACDONALD, D. G. F.
- MACDONALD, J. Project for a light Railway from Bareilly to Ranibagh. *Tract. folio. vol. 25.* Naini Tal, 1879. folio.
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Lond. 1808. 8vo.
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Lond. 1883. 8vo.
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Lond. 1881. 8vo.
- MACDOUGALL, Sir D. French Plan of Invasion. The defiant defence of Great Britain. *Tract. 8vo. vol. 219.*
Leamington, 1860. 8vo.
- McDOUGALL, N. The relative Merits of Simple and Compound Engines as applied to ships of war.
Lond. 1875. 8vo.
- MACEDO, J. M. DE. Notion de chorographie du Brésil.
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- McELROY, S. The Brooklyn Pumping Engines of 1860. *Tract. 8vo. vol.* [New York, 1891.] 8vo.
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Brooklyn, 1883. 8vo.
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- MACERONE, F. Expositions and illustrations, interesting to all those concerned in steam power, *etc.* *Tract. 8vo. vol. 20.*
Lond. 1835. 8vo.

- MACERONE, F.—*continued*. Hints to Paviers ; with . . . review by J. C. Robertson, Esq., of the various plans proposed for the improvement of carriage pavements, *etc.* 2nd edition. *Tract.* 8vo. vol. 4. *Lond.* 1833. 8vo.
- Macerone versus “Mechanics’ Magazine.” *Tract.* 8vo. vol. 201. *Lond.* 1834. 8vo.
- MACFARLANE, J. W. Practical Notes on Pipe Founding. *Lond.* 1888. 8vo.
- MACFARLANE, T. M. Report on the Bosgah Tank in the Goolburga District, S. Division, Nizam’s Dominions. *Goolburga*, 1880. folio.
- MACFIE, R. A. Colonial Questions pressing for immediate solution, *etc.* *Tract.* 8vo. vol. 205. *Lond.* 1870. 8vo.
- The Patent Bill. *Tract.* 8vo. vol. 426. *Edinburgh*, 1877. 8vo.
- The Patent Question under Free-trade : a solution of difficulties by abolishing or shortening the inventors’ monopoly . . . 2nd edition. *Tract.* 8vo. vol. 168. *Lond.* [1863 f] 8vo.
- MACGEAGH, B. S. F. A Popular Manual of the Law of Railway Rates. [1889.] See RICHARDS, H. C., and MACGEAGH, B. S. F.
- MACGEE, J. Librito del campo, con tablas utiles adaptadas al sistema métrico para los estudios y construccion de lineas ferreas. 2 vols. *Buenos Ayres*, 1891. 8vo.
- MACGEORGE, G. W. Note on the Nagpur and Chhattisgarh Railway. (Album of photographs.) *Bombay*, 1882. 4to. and folio.
- MCGILL UNIVERSITY. Calendar. Session 1862–63, (1872–73, 1876–77, 1881–82 to 1883–84, 89, 1889–90, *etc.*) *Montreal*, 1862–83, 88, *etc.* 8vo.
- Formal Opening of the Engineering and Physics Buildings. *Montreal*, 1893. 4to.
- New Applied Science Buildings. *Tract.* 8vo. vol. *Montreal*, 1890. 8vo.
- MACGREGOR, J. L. L. The Organization and Valuation of Forests on the continental system, in theory and practice. *Lond.* 1883. 8vo.
- MACGREGOR, JOHN, *Barrister-at-Law*. The Language of Specifications of Letters Patent for Inventions : with the authorities and decisions in all the important and latest cases. *Tract.* 8vo. vol. 365. *Lond.* 1856. 8vo.
- MACGREGOR, JOHN, *M.A.* The “Rob Roy” on the Jordan, Nile, Red Sea, and Gennesareth : a canoe-cruise in Palestine and Egypt, *etc.* *Lond.* 1869. 8vo.
- MACGREGOR, JOHN, *M.P.* Holland and the Dutch Colonies. *Lond.* 1848. 8vo.
- MACGREGOR, WILLIAM. Tables for computing the contents of Earthwork in the cuttings and embankments of Railways. *Lond.* 1871. 8vo.

- MACGREGOR, WILLIAM—*continued*. Gas Engines. *Lond.* 1885. 8vo.
- MCGREGOR, WILLIAM, *Electrical Engineer*. Loss of Life and Property by Lightning at Home and Abroad. *Tract.* 8vo. vol. 410. *Bedford*, 1886. 8vo.
- MCGUIRE, C. The Iron Work for the Dome of the proposed Government Building, World's Columbian Exposition, Chicago, ILL. *Tract.* 8vo. vol. [New York, 1892.] 8vo.
(From Trans. Am. Soc. C.E.)
- M'HARDY, J., *Lieut. R.E.* Lectures on Water Supply. *Tract.* 8vo. vol. 243. *Chatham*, 1864. 8vo.
- McHENRY, J. Atlantic and Great Western Railroad. "Kidnapping" a Railway—How the Trustees reorganized. *Tract.* folio. vol. 42. *Lond.* 1881. folio.
- McINNES, J. The "Steel-McInnes" Brake. 1875. See STEEL, J., and McINNES, J.
- MACINTOSH, J. System of "National Defence;" or, "New Strategies in Warfare;" also . . . official correspondence with the British Government, disclosing "the true cause" of the continuation of the late war, etc. *Tract.* 8vo. vol. 120. *Lond.* 1859. 8vo.
- MacIVOR, R. W.'E. Agricultural Chemistry; being . . . a course of lectures . . . with Appendices: "The Conservation of Water for Agricultural and Pastoral Purposes," by G. Gordon; "The Creation, Maintenance, and Enrichment of Forests," by Baron F. von Mueller. *Tract.* 8vo. vol. 332. *Brisbane*, 1870. 8vo.
- MACKAY, *Queensland*. Diagram of Rainfall at Mackay from 1st Jan., 1871, to 31st Dec., 1891. [1892?] folio.
- MACKAY, A. A Visit to Sydney, and the Cudjiegong Diamond Mines. *Tract.* 8vo. vol. 208. *Melbourne*, 1870. 8vo.
- MACKAY, C. Street Tramways for London. *Tract.* 8vo. vol. 294. *Lond.* 1868. 8vo.
- MACKEAN, —. The Mackean Rock Drill. *Tract.* 4to. vol. 94. *Lond.* [1885?] 4to.
- MACKELCAN, F. P. Suggestions to Iron-masters on increasing the demand for iron; also, to the iron-masters of Staffordshire, on competing with those of Scotland and Wales. *Tract.* 8vo. vol. 56. *Birmingham*, 1843. 8vo.
- MACKENZIE, A. The Parks, Open Spaces, and Thoroughfares of London. *Tract.* 8vo. vol. 198. *Lond.* 1869. 8vo.
- MACKENZIE, F. The Architectural Antiquities of the Collegiate Chapel of St. Stephen, Westminster, the late House of Commons: drawn from actual survey and admeasurements, etc. *Lond.* 1844. folio.
- MACKENZIE, F., and PUGIN, A. Specimens of Gothic Architecture: consisting of doors, windows, buttresses, pinnacles, etc. . . . selected from ancient buildings at Oxford, etc. *Lond.* [1835.] 4to.

- MACKENZIE, M. Nautical Descriptions of the Coasts of Ireland adapted to the several charts in the Maritime Survey of Ireland. Containing an account of the tides, etc. *Tract. folio. vol. 35.*
(Plans wanting.) *Lond. 1776. folio.*
- Orcades; or, a Geographic and Hydrographic survey of the Orkney and Lewis Islands, in eight maps . . . Interspersed with suitable direction for sailors. 4th edition, with . . . corrections. *Lond. 1791. folio.*
- Series of charts of the West Coasts and Western Islands of Scotland, from Cantire to Cape Wrath and Butt of the Lewis Long Island, etc. [Atlas, with nautical description of the tides, shoals, etc.] (Incomplete.) *Lond. 1775. folio.*
- MACKENZIE, T. Mechanical Appliances on board ship. [*Paper of the Shipmasters' Soc., No. 29.*] *Lond. 1893. 8vo.*
- MACKESY, W. H. Tables of Barometrical Heights, with practical suggestions by G. L. Molesworth. *Lond. 1882. 8vo.*
- Universal Scantling Diagram for stiffness. *Lond. 1879. 8vo.*
- MACKEY, S. A. The Mythological Astronomy of the ancients demonstrated, by restoring to their fables and symbols their original meanings. *Norwich, 1822. 12mo.*
- McKIE, H. U. On Private Connections, House Drains, etc. *Tract. 8vo. vol. 469.* *Carlisle, 1881. 8vo.*
- Report on Tar Macadam and Concrete Macadam Pavement for Roadways, etc. *Tract. 8vo. vol. 351.* *Carlisle, 1883.*
- Report on the subject of Sewage Irrigation. *Tract. 8vo. vol. 307.* *Carlisle, 1879. 8vo.*
- Report to the Council of the City of Carlisle on the subject of Public Slaughter-houses, lairage, etc. *Tract. 8vo. vol. 414.* *Carlisle, 1885. 8vo.*
- Report on the subject of the paving, flagging, edging of the public streets of Carlisle. *Tract. 8vo. vol. 311.* *Carlisle, 1859. 8vo.*
- Report upon materials for the repair and formation of streets. *Tract. 8vo. vol. 311.* *Carlisle, 1877. 8vo.*
- Remarks on the report of the Contract Enquiry Committee showing the cost of contract and day's work. *Tract. 8vo. vol. 311.* *Carlisle, 1859.*
- Report to the Urban Sanitary Authority for the City of Carlisle, on the Ventilation of Sewers and drains. *Tract. 8vo. vol. 307.* *Carlisle, 1878. 8vo.*
- MACKIE, S. J. The Geological and Natural History Repertory, and Journal of prehistoric archaeology and ethnology (1865-67). *Lond. 1867. 8vo.*
- MACKINLAY, G., Major. Accuracy of Artillery Fire. *Tract. 4to. vol. 105.* [1887?] *4to.*

- MACKINLAY, G., *Major—continued*. Mild Steel applied to Naval and Military purposes. *Tract*. 8vo. vol. 457. Lond. 1885. 8vo.
- Recent Gunnery. *Tract*. 8vo. vol. 367. Woolwich, 1885. 8vo.
- Review of work by Lieut. W. H. Jaques entitled "The establishment of steel gun factories in the U.S." *Tract*. 8vo. vol. Woolwich, 1885. 8vo.
- Text-Book of Gunnery. 1887. Lond. 1887. 8vo.
- McKINNEY, H. G. Irrigation in Upper India. *Tract*. 8vo. vol. 471. Sydney, 1883. 8vo.
- Report on River Darling. 1893. See DARLING, River.
- Map, shewing the Drainage Area of the Murray River, New South Wales. 1891. folio.
- Rivers of New South Wales. *Tract*. 8vo. vol. 494. Sydney, 1888. 8vo.
- See also :—NEW SOUTH WALES.—[*Water Conservation*.]
- McKIRDY, J. Our Seamen: how to get, and how to keep them. [*Papers of the Shipmasters' Soc.*, No. 4.] Lond. 1890. 8vo.
- McKONOCHE, A., *Capt. R.N.* Draught of a Memorial proposed to be laid before the trustees of the Queensferry Passage, etc. *Tract*. 8vo. vol. 14. Edinburgh, 1828. 8vo.
- On the most effective Employment of Steam Power in general, and more particularly in Mercantile navigation. [With MS. additions, etc.] *Tract*. 8vo. vol. 9. Edinburgh, 1829. 8vo.
- Steam Navigation extended, and made profitable. *Tract*. 8vo. vol. 9. Lond. 1829. 8vo.
- MACKROW, C. The Naval Architect's and Shipbuilder's Pocket-Book. Lond. 1879. 12mo.
- — Fourth edition, revised. Lond. 1889. 12mo.
- MACLAREN, C. Select writings . . . of the late Charles MacLaren, with a memoir, and photographs. 2 vols. Edinburgh, 1869. 8vo.
- McLAREN, JAMES. Report on utility of a Bar Iron Railroad from Edinburgh to Dalkeith, etc. 1824. See GRIERE, J., and McLAREN, J.
- MACLAREN, JAMES, *Barrister-at-Law*. A Brief Review of some of the principal arguments for and against the Chancellor of the Exchequer's proposal to reduce the quantity of fine gold in the sovereign. *Tract*. 8vo. vol. 172. Lond. 1869. 8vo.
- MACLAUCHLAN, H. Map of the Watling Street, the chief line of Roman communication leading across the counties of Durham and Northumberland, from a survey made in the years 1850 and 1851, etc. Lond. [1852?] folio.
- Memoir written during a survey of the Watling Street, in the years 1850 and 1851, etc. *Tract*. 8vo. vol. 117. Lond. 1852. 8vo.
- MACLEAN, C. Observations on Quarantine, etc. *Tract*. 8vo. vol. 69. Liverpool, 1824. 8vo.

- MACLEAN, J. L. The British Railway System. *Lond.* 1883.
- MCLEOD, D. A. Scheme for Supplying the City of Christchurch suburbs with Water from the Waimakari. *Tract.* 8vo. vol. Christchurch, N.Z., 1882.
- MACLEOD, H., *Prof.* On Eudiometers. [*Science Lectures at Kensington*, Vol. 2.] *Lond.* 1879.
- MACLEOD, K. M. Report on the Operations of the Sanitary Department carried out within the five years ended 30th A 1882. *Tract.* 8vo. vol. 341. *Glasgow*, 1882.
- MACMAHON, J. Ballinamore and Ballyconnell Drainage Navigation District. Report . . . on the drainage of the flood lands in the above district, and on the line of the junction nation for connecting Lough Erne and the river Shannon, *Tract.* 8vo. vol. 173. *Dublin*, 1845.
- Reports on the Drainage of the Flooded Lands and the improvement of the Navigations in the Loughs Neagh, Corrib, Mask Carra districts (Ireland). 2 vols. in 1. *Dublin*, 1845-46.
- [Nine Reports on the drainage and improvement of land in various districts in Ireland.] *Dublin*, 1843-47.
- MCMASTER, J. B. Bridge and Tunnel Centres. *New York*, 1875. 1
- High Masonry Dams. *New York*, 1876. 1
- MCMINN, T. J. The Six-foot Wooden Conduit for the Toronto Water Works. *Tract.* 8vo. vol. 456. *Montreal*, 1888.
- MACMORRAN, A. The Public Health (London) Act, 1891. 1 introduction, notes and index. *Lond.* 1891.
- MACMURTRIE, J. Report on Coal Seams, *etc.* 1892.
- BRADY, F. Dover Coal Boring . . . With reports by Watteyne, J. MacMurtrie, *etc.*
- MACNAMARA, F. N. Reports on Analysis of Potable Waters 1868-69. See INDIA.—BENGAL.—[*Water Supply.*]
- MACNAMARA, W. H. Reports of cases decided by the Railway Commissioners, *etc.* 1874, *etc.* See NEVILLE, R., and MACNAMARA, W. H.
- MCNAUGHT, W. A Lecture on the Steam Engine, *etc.* *Tract.* vol. 327. *Rochdale*, [1874.]
- On the Rolling of Ships, *etc.* *Tract.* 8vo. vol. 327. *Rochdale*, [1874.]
- MCNEILL, B. Mining and General Telegraphic Code. *Lond.* 1893.
- MACNEILL, Sir J. The Boyne Bridge: its history, as originally designed and constructed by Sir J. Macneill, together with correspondence between the directors of the Dublin and Belfast Junction Railway Company and Sir J. Macneill respecting the same in 1858-9. *Tract.* 8vo. vol. 127. *Belfast*, 1860.

- MACNEILL, Sir J.—*continued*. Dublin and Kilkenny Railway. Plans and sections. 2 vols. [1830?] 8vo.
- On the Resistance of Water to the passage of boats upon Canals, etc. *Tract*. 4to. vol. 1. Lond. 1833. 4to.
- Pirameter, or Instrument for ascertaining the power required to draw carriages over roads. *Tract*. 4to. vol. 23. [1835?] 4to.
- Report on a proposed Railway between the city of Cork and the town of Cove, in the south of Ireland. *Tract*. 4to. vol. 36. Lond. 1837. 4to.
- Report on the means of making the Lower Bann River navigable, and of preventing the waters of Lough Neagh from rising above their summer level. *Tract*. 4to. vol. 34. Lond. 1836. 4to.
- Report on the present state of the Arun Level, and the means proposed for the drainage of the adjacent country. *Tract*. 4to. vol. 37. Lond. 1837. 4to.
- Road Indicator, or Instrument for ascertaining the comparative merit of roads, etc. *Tract*. 4to. vol. 23. Lond. 1833. 4to.
- Tables for Calculating the Cubic Quantity of Earthwork in the cuttings and embankments of canals, etc. Lond. 1833. 8vo.
- Tables of Experiments on the Timber Arch of the viaduct over the South Calder on the Wishaw and Coltness railway. [MS. drawings.] 1842. folio.
- MACNEILL, T. Water-supply of London by means of natural filtration of the water of the river Thames. *Tract*. 8vo. vol. 151. Lond. 1866. 8vo.
- M'NEILL, W. G. Report on the surveys, . . . for a Railroad from Boston to Providence and Taunton; and a Geological Memoir of the country between Massachusetts and Narragansett bays; with an Act to incorporate the Boston and Providence Railroad. *Tract*. 8vo. vol. 2. Boston, 1832. 8vo.
- MACOUN, J. Catalogue of Canadian Plants. 1884. See CANADA.— [Geological Survey.]
- Manitoba and the Great North-West. Lond. 1883. 8vo.
- MACQUARIE HARBOUR, Tasmania. Report on Entrance to Macquarie Harbour. [Hobart,] 1890. folio.
- M'QUEEN, J. A general Plan for a Mail Communication by steam between Great Britain and the eastern and western parts of the world; also, to Canton and Sydney, westward by the Pacific, etc. *Tract*. 8vo. vol. 201. Lond. 1838. 8vo.
- MACQUISTON, B. Report respecting a new line of road from Hamilton to Elvanfoot. *Tract*. 4to. vol. 4. Glasgow, 1813. 4to.
- MACRITCHIE, J. Report on Sanitary Arrangements of Towns visited in India, and Proposals for the Improvement of the Sanitation of Singapore. Singapore, 1893. folio.

- MACRORY, E.** Report of cases relating to letters-patent for inventions, . . . with notes of applications for amendments, leave to enter disclaimers, *etc.* Part I. *Tract.* 8vo. vol. 365.
London. 1855. 8vo.
- MACTURK, G. G.** A History of the Hull Railways.
Hull, [1880?] 8vo.
- McWILLIAM, R.** An Essay on the Origin and Operation of the Dry Rot ; with a view to its prevention or cure, *etc.*
London. 1818. 4to.
- MADAMET, A.** Note sur les indicateurs du nombre de tours par minute installés sur la corvette cuirassée la Thétis. *Tract.* 8vo. vol. 268. *Brest,* 1875. 8vo.
- Résistance des matériaux. *Paris,* 1881. 8vo.
- — [Another edition, enlarged.] *Paris,* 1891. 8vo.
- La thermodynamique et ses applications aux machines à vapeur. *Paris,* 1889. 8vo.
- Tiroirs et distributeurs de vapeur, *etc.* [Encyclopédie scientifique des aide-mémoire. Contains a bibliography.] *Paris,* [] 8vo.
- Traité et aide-mémoire des déviations des compas. *Paris,* 1882. 8vo.
- MADAN, H. G.** Exercises in practical Chemistry. 1872. *See* **HARCOURT, A. G. V., and MADAN, H. G.**
- MADEIRA, Brazil.** Comissão de Estudos da Estrada de Ferro do Madeira e Mamoré. Impressões de viagem. *Tract.* 8vo. vol. 411. *Rio de Janeiro,* 1885. 8vo.
- Relatório apresentado a S. Ex.^a O. S.^a Conselheiro João Ferreira de Moura pelo engenheiro chefe Julio Pinkas. *Rio de Janeiro,* 1885. 4to.
- MADRAS.** *See* **INDIA.—MADRAS.**
- MADRID.—Escuela especial de ingenieros de caminos, canales y puertos.** Catalogo de la Bibliotheca de la Escuela especial de ingenieros de caminos, canales y puertos. *Madrid,* 1875. 8vo.
- Curso de 1867 a 1868. Programas de las asignaturas que comprende la enseñanza. *Tract.* 8vo. vol. 399. *Madrid,* 1868. 8vo.
- Programas de las asignaturas que comprende la enseñanza. 1885— . *Madrid,* 1886— . 8vo.
- Instrucciones y programas para el ingreso. 1885. *Madrid,* 1885. 8vo.
- Lecciones sobre la teoria dinamica de la maquinas. 1873. 8vo.
- Reglamento. Edicion oficial. *Madrid,* 1865. 8vo.
- *Real Observatorio.* Observaciones meteorológicas efectuadas . . . desde 1.^o de diciembre de 1865 al 30 noviembre de 1866. *Tract.* 8vo. vol. 401. *Madrid,* 1867. 12mo.

- MADRID**—*continued. Sociedad de los Ferrocarriles de Madrid à Cáceres y á Portugal.* Memoria presentada . . . á la Junta General de Accionistas, celebrada el dia 7 de junio de 1887. *Tract. 4to. vol. 107. Madrid, 1887.*
- *Sociedad Geográfica. Boletin. Vol. 1. Madrid, 1876. 8vo.*
- MADSEN, C. L.** *Recherches sur la loi du mouvement télégraphique international. Tract. 8vo. vol. 281. Paris, 1877. 8vo.*
- MAGANZINI, I.** *Bonificazione di Burana. Note illustrative. Tract. 4to. vol. 108. Roma, 1887. 4to.*
- *Sulla resistenza d'attrito. Tract. 8vo. vol. 295. Roma, 1878. 8vo.*
- *Sulle opere idrauliche dei paesi bassi. (Atlas of plates.) Rome, 1877. folio.*
- MAGELLAN, J. H. DE.** *Collection de différens traités sur des instrumens d'astronomie, physique, etc. Tract. 4to. vol. 20. Lond. 1780. 4to.*
- *Description et usages des nouveaux baromètres, pour mesurer la hauteur des montagnes, et la profondeur des mines, etc. Tract. 4to. vol. 20. Lond. 1779. 4to.*
- MAGINNIS, A. J.** *The Atlantic Ferry: its ships, men, and working, etc. Lond. 1892. 8vo.*
- *Failure of Steel for Boilers. Tract. 8vo. vol. 409. Lond. [1885.] 8vo.*
- *On a new system of Steering Gear and Rudder Strains, etc. Tract. 4to. vol. 99. Lond. 1886. 4to.*
- *Transatlantic Lines and Steamships. 2 pts. Tract. 8vo. vol. 528. Liverpool, 1881, 92. 8vo.*
- MAGNETIC TELEGRAPH COMPANY.** *Report of an appeal against Rating on Telegraph Property: heard before the Assistant Judge at Westminster. The Magnetic Telegraph Company against the parish of St. Luke, Middlesex. Tract. 8vo. vol. 119. Lond. 1856. 8vo.*
- MAGNIN, A., and STERNBERG, G. M.** *Bacteria. New York, 1884. 8vo.*
- MAGNUS, P.** *Hydrostatics and Pneumatics. Lond. 1878. 12mo.*
- MAGPIE CREEK RAILWAY.** *Particulars. (Official Report.) [Adelaide,] 1878. folio.*
- MAGUIRE, E., Capt.** *Professional Notes [on armour and projectiles] Tract. 8vo. vol. 367. Washington, 1884. 8vo.*
- MAHAN, D. H.** *An Elementary Course of Civil Engineering, for the use of cadets of the United States Military Academy. 6th edition. New York, 1860. 8vo.*
- *A Treatise on Civil Engineering: revised and edited . . . by De Volson Wood. 2nd edition. Lond. 1875. 8vo.*

- MAHAN, D. H.—*continued*. An Elementary Course of Military Engineering. 2 vols. New York, 1867. 8v
- MAHLER, P. Contribution à l'étude des combustibles : détermination industrielle de leur puissance calorifique, etc. Tract. vol. Paris, 1893. 4
- MAHMOUD BEY. Rapport sur l'éclipse totale de soleil observée à Dongolah (Nubie) le 18 juillet, 1860. Tract. 4to. vol. 79. Paris, 1861. 4
- MAHOMED MASOOM. A History of Sind . . . from A.D. 1590 . . . Translated by G. G. Malet, etc. [Selections from the Records of the Bombay Govt. No. 13, n.s.] Bombay, 1855. 8
- MAHON, Lord. On the Connection between the Quadrature of the Circle and the Geometrical Trisection of the Angle. Lond. 1832. 8
- Twelfth Axiom of the First Book of Euclid. Lond. [1830.] 8
- MAIDEN, J. H. Wattles and Wattle-Barks ; being hints on conservation and cultivation of wattles, etc. Tract. 8vo. vol. 4. Sydney, 1890. 8
- MAIDSTONE. Report respecting Boiler Explosion at Maidstone. Lond. 1881. folio
- MAIER, F. F. Ueber den Widerstand welchen eine Flüssigkeit infolge der ihr eigenthümlichen Trägheit einem sich in derselben bewegendem ganz oder theilweise eingetauchten Körper entgegensetzt. Tract. 8vo. vol. 473. Wien, 1881. 8v
- MAIER, J. Arc and Glow Lamps : a practical handbook of Electric Lighting. Lond. 1886. 8v
- The Telephone. 1889. See PREECE, W. H., and MAIER, J.
- Le téléphone, 1891. See PREECE, W. H., and MAIER, J.
- MAIGNE, W. Nouveau manuel complet du fabricant de briquets et d'allumettes chimiques ; ou, traité général de tous les moyens connus de se procurer du feu et de la lumière. Suivi d'un exposé succinct de la lumière électrique et des appareils qui la produisent, par M. Brandely. Paris, 1878. 12mo.
- MAILLIET, T. V. Stoppages on Canals and Canalized Rivers in Belgium. [5th Int. Congr. Int. Nav.] [Paris, 1892.] 8vo.
- MAIN, River. Die Bauten der Canalisirung des Mains von Frankfurt a. M. bis zum Rhein ausgeführt in den Jahren 1883 bis 1886. Frankfurt a. M., 1888. 8vo.
- Canalization of the River Main between Francfort and Mayence. Tract. 8vo. vol. 409. Francfort, 1885. 8vo.
- MAIN, D. D. Cholera and the Water Supply. Tract. 8vo. vol. 109. Newcastle, 1853. 8vo.
- MAIN, T. J., and BROWN, T. The Indicator and Dynamometer, with their practical applications to the steam engine. 4th edition. Tract. 8vo. vol. 373. Lond. 1864. 8vo.

- MAIN, T. J., and BROWN, T.—*continued*. The Marine Steam-engine. Designed chiefly for the use of the officers of Her Majesty's navy. 4th edition. *Lond.* 1860. 8vo.
- Questions on subjects connected with the Marine Steam-engine, and examination papers, with hints for their solution. *Tract.* 8vo. vol. 371. *Lond.* 1857. 8vo.
- — New edition. *Tract.* 8vo. vol. 371. *Lond.* 1863. 8vo.
- MAIRAN, J. J. D. DE. *Traité physique et historique de l'aurore boréal.* 1754. See *ACADÉMIE DES SCIENCES*.
- MAIS, H. C. Adelaide and Nairne Railway Viaducts. *Adelaide*, 1882. folio.
- MAITLAND, N.S.W. Water Supply of Maitland, Morpeth, Newcastle, etc. Report by W. Clark. *Sydney*, 1877. folio.
- MAITLAND, W. An Essay towards the Improvement of Navigation, chiefly with respect to the instruments used at sea. *Tract.* 8vo. vol. 65. *Lond.* [1750?] 8vo.
- MAJENDIE, V. D., Col. Guide book to the Explosives Act, 1875. *Lond.* 1877. 12mo.
- [Reports by Col. Majendie on Explosions are entered under the names of the places at which they occurred.]
- MAKAROFF, S. O. On the Interchange of Water between the Black Sea and the Mediterranean. *St. Petersburg*, 1885. 8vo.
- MALAISE, C. Description de gîtes fossilifères devoniens et d'affleurements du terrain crétacé. *Tract.* 4to. vol. 94. *Bruxelles*, 1879. 4to.
- MALAN, E. DE M. Apparatus for protecting Trains standing at a Signal Cabin on either the right or wrong line. *Tract.* 8vo. vol. *Howden*, 1890. 8vo.
- MALDEN, Surrey. Bill for the more effectual Drainage of certain Lands in the Valley of Malden and Sheen, etc. *Lond.* 1859. folio.
- MALÉZIEUX, E. Travaux publics des États-Unis d'Amérique en 1870, etc. (Atlas of plates.) *Paris*, 1873. 4to.
- Les chemins de fer anglais en 1873 . . . 2^e édition. *Paris*, 1874. 4to.
- MALHERBE, R. De l'exploitation de la houille dans le pays de Liège. *Liège*, 1863. 8vo.
- MALINS, W. A plan for additional National Defences. *Tract.* 8vo. vol. 286. *Lond.* 1848. 8vo.
- MALLADA, L. Sinopsis de las especies fósiles que se han encontrado en España. Vols. 2 and 3. *Madrid*, 1885–87. 8vo.
- MALLARD, E., and LE CHATELIER, H. Recherches expérimentales et théoriques sur la combustion des mélanges gazeux explosifs. *Paris*, 1883. 8vo.

MALLET, A. Ascenseur hydraulique en rampe pour canaux.
Tract. 4to. vol. Paris, 1891. 4to.

— Compound Engines. History and Theory of Action, with results of European practice, translated from the French of A. Mallet. (The Compound Steam Engine and its Steam-generating plant: by Richard H. Buel.) 2 pts. *New York, 1884. 12mo.*

— Développement de l'application du système compound aux machines locomotives. *Tract. 8vo. vol. 492. Paris, 1890. 8vo.*

— Étude sur les chemins de fer de montagnes avec rail à crémail-
lère. *Tract. 8vo. vol. 221. Paris, 1872. 8vo.*

— Plan incliné pour transbordement de bateaux à Beauval près
Meaux. Notice descriptive. *Tract. 8vo. vol. 535. Paris, 1892. 8vo.*

— Résultats obtenus dans l'emploi des locomotives compound sur
les chemins de fer secondaires. *Tract. folio. vol. 31. Paris, 1880. folio.*

MALLET, C. Approvisionnement d'eau de Greenock; exposé
succinct du projet de conduite des eaux du Shaw, et situation des
travaux. *Tract. 8vo. vol. 152. Paris, 1831. 8vo.*

MALLET, C. F. Noticé historique sur le projet d'une distribution
générale d'eau à domicile dans Paris. *Tract. 4to. vol. 37. Paris, 1830. 4to.*

MALLET, J. W. Earthquake Catalogue of the British Association.
1858. See MALLET, R., and J. W.

— On the chemical and meteorological conditions involved in the
successful Cultivation of Cotton. *Tract. 8vo. vol. 135. Lond. 1861. 8vo.*
(From Proc. Roy. Soc.)

— Preliminary Report on the results of an investigation made . . .
as to the Chemical Methods in use for the determination of
Organic Matter in potable Water. [*National Board of Health*
Bulletin, Supplement, No. 19.] *Tract. 4to. vol. 87. Washington, 1882. 4to.*

MALLET, R. Account of Experiments made at Holyhead upon the
Transit-velocity of Waves through the local rock formations.
Tract. 8vo. vol. 139. (From Proc. Roy. Soc.) Lond. [1861.] 8vo.

— — Appendix. *Tract. 4to. vol. 45. Lond. [1862.] 4to*
(From the Phil. Trans.)

— Address delivered at the anniversary meeting of the Geological
Society of Dublin, February 10, 1847. *Tract. 8vo. vol. 70. Dublin, 1847. 8vo.*

— Great Neapolitan Earthquake of 1857. . . . Report to the
Royal Society of London of the expedition made to investigate
the circumstances of the great earthquake of December, 1857.
the
2 vols. *Lond. 1862. 8vo.*

- MALLET, R.—*continued*. First report upon Experiments upon the Action of Sea and River Water, . . . upon cast and wrought iron. *Lond.* 1839. 8vo.
- On the action of Air and Water upon cast and wrought Iron and Steel. *Tract.* 8vo. vol. 501. *Lond.* 1843. 8vo.
(From Min. Proc. Inst. C.E.)
- Mallet's Bericht über die atmosphärische Eisenbahn von Dublin nach Dalkey . . . ausgeführt . . . von den Herren Clegg und Samuda. Mit einem Stahlstich, etc. *Darmstadt*, 1844. 8vo.
- Mallet's patent Iron Buckled Plate Elastic Permanent Way. *Tract.* 8vo. vol. 301. *Lond.* 1868. 8vo.
- Notice of the British Earthquake of Nov. 9th, 1852. *Tract.* 4to. vol. 42. *Dublin*, 1854. 4to.
- On Muzzle Swivelling and Hydraulic Gun Mounting. *Tract.* 8vo. vol. 131. *Lond.* [1860 ?] 8vo.
- On Observations of Earthquake Phenomena. *Tract.* 8vo. vol. 103. *Lond.* [1859.] 8vo.
- On the military and naval uses of very large Shells, etc. *Tract.* 8vo. vol. 128. *Lond.* [1858.] 8vo.
- On the Molecular Construction of the Metals of Ordnance, as affecting its construction and wear in service. *Tract.* 8vo. vol. 120. *Lond.* [1857.] 8vo.
- On the physical cause of the increased Deflection of Girders of Bridges, exposed to the transverse strain of a rapidly passing load. *Tract.* 8vo. vol. 101. *Dublin*, [1856.] 8vo.
- On the Physical Conditions involved in the Construction of Artillery, etc. *Lond.* 1856. 4to.
- On the Relation of Molecular Forces to Geology. *Tract.* 8vo. vol. 80. *Dublin*, 1844. 8vo.
- The Practical Mechanics' Journal Scientific Record of the International Exhibition of 1862, etc. [1862 ?] See JOHNSON, J. H., and MALLET, R.
- Presidential address to the Institution of Civil Engineers of Ireland. *Tract.* 8vo. vol. 155. *Dublin*, 1866. 8vo.
- Report on Machines and Mechanical Apparatus in general at the Paris Exhibition. *Tract.* 8vo. vol. 209. [1867.] 8vo.
- Report on the experimental inquiry . . . on Railway Bar Corrosion. *Tract.* 8vo. vol. 88. *Lond.* 1850. 8vo.
- Report on the proposed formation of the reservoirs on the river Dodder, county of Dublin, for the prevention of sudden floods, and accumulation of water, etc. *Tract.* 8vo. vol. 78. *Dublin*, 1844. 8vo.
- The Rights of Priority in the principles and method of constructing Ordnance in superimposed rings with initial tension, etc. *Tract.* 8vo. vol. 128. *Dublin*, 1860. 8vo.

- MALLET, R.—*continue*^d. Three Reports upon improved methods of constructing and working Atmospheric Railways. *Tract.* 4to. vol. 36. [Lond. 1845.] 4to.
- Volcanic Energy: an attempt to develop its true origin and cosmical relations. *Tract.* 4to. vol. 71. Lond. 1873. 4to.
(From the Phil. Trans.)
- See HOBBS, A. C. The construction of locks . . . With a note upon iron safes, by R. Mallet. 1868.
- See PALMIERI, L. Eruption of Vesuvius . . . With notes and introductory Sketch by R. Mallet. 1873.
- MALLET, R., and J. W. The Earthquake Catalogue of the British Association, with the discussion, curves and maps, *etc.*
Lond. 1858. 8vo.
- MALLET, R., and FAIRLIE, R. F. The Safes' Challenge Contest at the International Exhibition of Paris, 1867. Statement of the English members of the committee, *etc.* *Tract.* 8vo. vol. 165.
Lond. [1867.] 8vo.
- MALMÖ. Proposed Contract between the city of Malmö and N. N., concerning the lease of the Gaswork of the town. *Tract.* 8vo. vol. 479. Malmö, 1883. 8vo.
- MALMSBURY, Victoria. Progress report on the Malmsbury Reservoir. Melbourne, 1870. folio.
- MALO, G. La grève et les chemins de fer. *Tract.* 8vo. vol. Lyon, 1892. 8vo.
- MALO, L. L'asphalte: son origine, sa préparation, ses applications. 2^e édition. Paris, 1888. 8vo.
- Guide pratique pour la fabrication et l'application de l'asphalte et des bitumes. Paris, [1870?] 12mo.
- Note sur l'asphalte. Son origine, sa préparation, ses applications, suivie de divers documents sur la matière. *Tract.* 4to. vol. 67. Paris, 1863. 4to.
- Note sur les chaussées en asphalte comprimé. *Tract.* 4to. vol. 67. Paris, 1864. 4to.
- Note sur les maçonneries asphaltiques. *Tract.* 8vo. vol. 475. Paris, [1885?] 8vo.
- Note sur l'état actuel de l'industrie de l'asphalte. *Tract.* 8vo. vol. 315. Paris, 1879. 8vo.
- Les voies asphaltées de Berlin. *Tract.* 8vo. vol. 400. Paris, 1885. 8vo.
- On Asphalte Roadways, *etc.* Lond. 1886. 8vo.
- L'Exposition Universelle de 1889. Lyon, 1890. 8vo.
- Notice sur Eugène Flachet. *Tract.* 8vo. vol. 249. Paris, 1874. 8vo.
- Le rachat des chemins de fer, ses dangers pour les intérêts publics. *Tract.* 8vo. vol. 319. Lyon, 1880. 8vo.
- La sécurité dans les chemins de fer. Paris, 1882. 8vo.

- MALORTIE DE MARTEMONT, C. DE.** *The Theory of Field-Fortification.* 3rd edition. *Lond.* 1834. 8vo.
- MALTA.** Papers relating to the new Malta Dock. *Lond.* 1863–65. folio.
- *Petition from Malta praying for Reforms.* *Lond.* 1864. folio.
- *Report on the sanitary condition of Malta and Gozo, with reference to the epidemic cholera in the year 1865.* By Dr. Sutherland. *Lond.* 1867. folio.
- *Souvenir de Malte: containing photographic views . . . accompanied by historic summaries. Prepared on the occasion of the Colonial and Indian Exhibition of 1886, by the Malta Exhibition Commission.* *Malta,* 1886. folio.
- MALTHUS, T. R.** *An Essay on the Principle of Population . . .* 5th edition, with important additions. 3 vols. *Lond.* 1817. 8vo.
- MAMY, H.** *La cryptographie.* See NANSOUTY, M. DE. *Science et guerre, etc.* 1888.
- MANBY, A.** *Patent Specification and Drawing of A. Manby's Oscillating Engine.* (In case.) [*Lond.* 1821.]
- MANBY, A., and OTHERS.** *Au Roi, en Conseil d'État: Les sieurs Manby, Henry et Wilson, formant la Compagnie d'éclairage par le gaz hydrogène, contre les sieurs Bourienne, Caret et Chaptal, formant la Compagnie, dite Royale, d'éclairage par le gaz hydrogène.* *Tract. 4to. vol. 6.* *Paris,* 1822. 4to.
- MANBY, C.** *Report . . . on Player's Patent Furnace, applied to the boilers on the 'Anthracite' steam vessel.* *Tract. 4to. vol. 38.* *Lond.* 1840. 4to.
- See also:—PARKES, J., and MANBY, C.
- MANBY, E.** *The Chilian Revolution, etc.* *Tract. 8vo. vol.* *Lond.* 1891. 8vo.
- MANBY, E. O., and J.** *Notes of a Survey and Estimate of the Proposed Iron Works at Languin.* *Tract. 8vo. vol. 56.* *Lond.* 1841. 8vo.
- *Report on the Madrid and Valencia Railway.* *Tract. 4to. vol. 81.* *Lond.* 1846. 4to.
- MANBY, J.** *Notes of . . . Estimate of the proposed Iron Works at Languin.* 1841. See MANBY, E. O., and J.
- MANCE, Sir H. C.** *Official Report of the Persian Gulf Bushire-Iask Cable Expedition, 1885.* *Lond.* 1886. 8vo.
- MANCETTER, Warwickshire.** *Report by Major J. P. Cundill, R.A., on the Explosion of Dynamite at the Mancetter Bridge Quarry, etc.* *Lond.* 1886. folio.
- MANCHESTER.**—*Free Libraries.* *Catalogue of the Reference Department.* 3 vols. *Lond.* 1864–81.
- *Annual Reports.* *Manchester,* 1854, etc. 8vo.
(1st, 3rd, 4th, and 14th Reports wanting.)

- MANCHESTER—*continued*. *Mechanics' Institution*. Catalogue of the Library, with the rules and a sketch of the objects and advantages of the Institution. (Supplement.) *Tract. 8vo. vol. 121.*
Manchester, 1834, 35. 8vo.
- Reports of the Directors, and Proceedings at the Annual General Meetings of the members . . . February 26, 1835, February 25, 1836, and February 23, 1837. *Tract. 8vo. vol. 68.*
Manchester, 1835–37. 8vo.
- *Technical School*. Report of a Visit to several Continental and English Technical Schools, by a Deputation from the Manchester Technical School, *etc.* *Tract. 8vo. vol. Manchester, 1891. 8vo.*
- A Syllabus of the Departments, Courses of Study, and Teachers, for the Session 1886–87(–90). 4 vols.
Manchester, 1886–89. 8vo.
- Sixth Annual Report, 1889. *Manchester, 1889. 8vo.*
- *Victoria University*. Calendar for the year 1883–84, *etc.*
Manchester, 1883, etc. 8vo.
- [*Gas Supply*.] Report [of a Committee on Gas Meters]. *Tract. 8vo. vol. 117. 1858. 8vo.*
- [*Improvements*.] The Improvement of Manchester : a report by the Water Supply, Drainage, and Towns Improvement Company.
Manchester, 1845. 8vo.
- [*Sewage*.] Manchester Sewage. Scheme. [Evidence before the Committee.] 2 vols. *Manchester, 1888. 8vo.*
- [*Water Supply*.] Report from the Surveying Officers, and Minutes of Evidence on the Manchester and Salford Water-Works Bill.
Lond. 1847. folio.
- An Act to enable the Mayor, Aldermen, and Burgesses . . . to construct Waterworks, *etc.* (1847). *Lond. 1850. folio.*
- An Act to alter, amend, and enlarge the Powers and Provisions of the Manchester Corporation Waterworks Act, 1847.
Lond. 1848. folio.
- An Act for the further Amendment of the Acts relating to the Manchester Corporation Waterworks. *Lond. 1851. folio.*
- Report from the Surveying Officers, and Minutes of Evidence on the Manchester Corporation Waterworks Bill.
Lond. 1847. folio.
- Select Committee on the Manchester Corporation Water Bill. Minutes of Evidence. [Report from the Committee, *etc.*]
Lond. 1878. folio.
- Manchester Corporation Theatre Royal. King Cræsus : or, Harlequin Town Clerk Irwell and the Thirlmere Lake. By an "Oddfellow." [A satire on the plan proposed by the Manchester Corporation for supplying that town with water.] *Tract. 8vo. vol. 296. Lond. 1878. 8vo.*

MANCHESTER AND CHESHIRE JUNCTION RAILWAY.

Minutes of evidence taken before the Lords Committees to whom the Bill, intituled "An Act for making a Railway from Manchester to join the Grand Junction Railway near Crewe Hall in the County of Chester . . . with two several branches therefrom" was committed. (Incomplete.) [*Lond.* 1836.] folio.

MANCHESTER AND LEEDS RAILWAY. Manchester and Leeds Railway. Prices at which the Liddenden, Sowerby, Copley, Elland, and Rastrick contracts were executed. *Tract.* folio. vol. 36. [1833?] folio.

— Report of the Board of Trade on the projected . . . Railway. *Tract.* 8vo. vol. 179. *Leeds*, 1845. 8vo.

MANCHESTER AND SALFORD SANITARY ASSOCIATION.

Sewer Rivers. Minute of Committee on the practicability of purifying the water flowing from the River Medlock into the Duke of Bridgewater's Canal. *Tract.* 8vo. vol. 105.

Manchester, 1856. 8vo.

MANCHESTER, ASHTON-UNDER-LYNE, AND OLDHAM CANAL. Act for making a navigable Canal from Manchester to Ashton-under-Lyne and Oldham, etc. *Lond.* 1792. folio.

— Act [for extending the Canal]. *Lond.* 1793. folio.

— Act to enable the Proprietors to complete the Canal. *Lond.* 1798. folio.

— Act for enabling the Proprietors . . . more effectually to provide for the discharge of their debts and to complete the Canal. *Lond.* 1805. folio.

— Act for amending the Acts [relating to the Manchester, Ashton, and Oldham Canal]. *Lond.* 1800. folio.

MANCHESTER ASSOCIATION OF ENGINEERS [*formerly* MANCHESTER ASSOCIATION OF EMPLOYERS, FOREMEN, AND DRAUGHTSMEN]. Transactions. *Manchester*, 1885, etc. 8vo.

— Report of Proceedings at the 26th Anniversary Dinner of the Manchester Association of Employers, Foremen, and Draughtsmen. *Tract.* 8vo. vol. 399. *Manchester*, 1882. 8vo.

— Visit of the Manchester Association of Employers, Foremen, and Draughtsmen to Northwich, the hydraulic river and canal boat lift at Anderton, and the new flood sluices and Locks at Dutton, May 17th, 1884. *Tract.* 8vo. vol. 471. *Manchester*, 1884. 8vo.

MANCHESTER, BOLTON, AND BURY CANAL. Act for making . . . a navigable Canal from Manchester to Presto-lee-Bridge, and from thence by one branch to Bolton . . . and by another branch to Bury, etc. *Lond.* 1791. folio.

— Act to enable the proprietors of the . . . Canal to raise money to complete the same. *Lond.* 1805. folio.

MANCHESTER DISTRICT INSTITUTION OF GAS ENGINEERS. Reports of meetings. [*Lond.*] 1872-84. 8vo.

MANCHESTER DISTRICT INSTITUTION OF GAS ENGINEERS—*continued*. Papers on Scrubbers, Washers, *etc.*

Stalybridge, 1877. 8vo.

MANCHESTER GEOLOGICAL SOCIETY. Transactions. 18 vols.

Lond. and Manchester, 1841–88. 8vo.

MANCHESTER, HUDDERSFIELD AND GREAT GRIMSBY RAILWAY. Copy of Bill. *Tract. folio. vol. 25.* 1846. folio.

MANCHESTER LITERARY AND PHILOSOPHICAL SOCIETY.

Catalogue of the Library. *Tract. 8vo. vol. 388.*

Manchester, 1875. 8vo.

— Memoirs. 1st series. 5 vols. *Manchester*, 1785–98. 8vo.

— — — 2nd series. 15 vols. *Manchester*, 1805–60. 8vo.

— — — 3rd series. 10 vols. *Manchester*, 1862–87. 8vo.

— — — 4th series. (Memoirs and Proceedings.)

Manchester, 1887, *etc.* 8vo.

MANCHESTER SCIENCE LECTURES. The Manchester Science Lectures, 1866–76. 4 vols. *Manchester*, 1866–76. 8vo.

MANCHESTER SCIENTIFIC AND MECHANICAL SOCIETY.

Proceedings. (Imperfect.) *Manchester*, 1873–74. 8vo.

MANCHESTER, SHEFFIELD AND LINCOLNSHIRE RAILWAYS. [Acts conferring Additional Powers and authorizing the Company to make New Railways, 1879, 83, 85, 86, 88, 90.]

Lond. 1879–90. folio.

— Manchester, Sheffield and Lincolnshire Railway, and Trent, Ancholme and Grimsby Railway, against the Guardians of the Poor of the Caistor Union, and of the Glanford Brigg Union—Judgment of the Railway Commissioners [on the appeals of these companies against the sums at which hereditaments in their occupation have been rated to the relief of the poor under the Union Assessment Committee Acts]. *Lond.* 1874. folio.

MANCHESTER SHIP CANAL. Minutes of Evidence and Proceedings of the Select Committee of the House of Lords on the Manchester Ship Canal Bill. 3 vols. in 8.

Lond. 1883–85. folio.

— Minutes of Evidence and Proceedings of the Select Committee of the House of Commons on the . . . Bill. 3 vols. in 8.

Lond. 1883–85. folio.

— Description of the project, *etc.* 2nd edition. *Tract. 8vo. vol. 35.*

Manchester, 1884. 8vo.

— The London daily and periodical Press on the question of the Manchester Ship Canal. *Tract. 8vo. vol. 350.*

Manchester, 1882. 8vo.

— The Manchester Ship Canal.

Lond. 1894. 4to.

(Reprinted from Engineering.)

— The Manchester Ship Canal. Why it is wanted! and Why it will pay! By Cottonopolis. *Tract. 8vo. vol. 350.*

Manchester, 1882. 8vo.

- MANCHESTER SHIP CANAL**—*continued*. The proposed Manchester Ship Canal. By Mancuniensis. 2 pts. *Tract.* 8vo. vol. 350. *Manchester*, 1882. 8vo.
- Some legal considerations in relation to the proposed Manchester Ship Canal. By a Manchester Barrister. *Tract.* 8vo. vol. 350. *Manchester*, 1882. 8vo.
- Engineers' Reports and Report of the Provisional Committee, also Report of Meeting and list of Subscribers to original Guarantee Fund. *Tract.* 8vo. vol. 350. *Manchester*, [1882.] 8vo.
- Report of the Provisional Committee to the Subscribers to the Guarantee Fund, etc. *Tract. folio.* vol. 42. *Manchester*, 1882. folio.
- MANCHESTER STEAM USERS' ASSOCIATION** [*formerly Association for the Prevention of Steam Boiler Explosions*].
- Address to the Conference on Steam Boiler Legislation . . . 13th January, 1871. [Signed: William Fairbairn, on behalf of the Executive Committee.] *Tract.* 8vo. vol. *Manchester*, 1871. 8vo.
- Annual Report (2nd, 4th, 5th, 7th-9th, 13th, etc.) of the Committee of Management. *Manchester*, 1857, etc. 8vo.
- The Association's Policy, past and present; its general Working, Rates, and Rules. *Tract.* 8vo. vol. *Manchester*, 1864. 8vo.
- Chief Engineer's monthly Report (brief abstract) to Executive Committee. *Manchester*, 1862-83. 8vo.
- Chief Engineer's monthly report to executive committee, September, 1868. [Contains the Report of the trials at Wigan of the South Lancashire and Cheshire Steam Coals, 1867-68.] *Manchester*, 1868. 8vo.
- Memorial for the Prevention of Steam Boiler Explosions and for the attainment of economy in the application of steam. *Tract.* 4to. vol. 74. *Manchester*, 1869. 4to.
- Memorial to Sir Michael Hicks-Beach, on the Prevention of Steam Boiler Explosions. *Tract.* 8vo. vol. 489. *Manchester*, 1890. 8vo.
- Memorial to the Rt. Hon. Richard Assheton Cross . . . on the Prevention of Steam Boiler Explosions. *Tract.* 8vo. vol. *Manchester*, 1875. 8vo.
- [Another edition.] *Manchester*, 1876. 8vo.
- Report of Proceedings at the Annual General Meeting of the General Body of the Members. *Manchester*, 1885, etc. 8vo.
- Report on a series of Red-hot Furnace Crown Experiments, to ascertain the result of injecting the feed-water into a Boiler when short of water and with fires burning. *Manchester*, 1889. 8vo.
- MANCHESTER**, *New Hampshire, U.S.A.* 1st(-3rd) annual report of the Water Commissioners of the city of Manchester, N.H., 1872-74. *Manchester, N.H.*, 1873-75. 8vo.

- MANDEY, V., and Moxon, J.** *Mechanick Powers : or, the mistery of nature and art unvail'd, etc.* *Lond.* 1696. 8vo.
- MANETTI, A.** *Sulla stabile sistemazione delle acque di Val de Chiana. Tract. folio. vol. 29.* *Firenze*, 1840. folio.
- MANETTI, A., and RENARD, F.** *Profilo di livellazione della Chiana e dell' Arno dell' argine di separazione presso Chiusi sino al mare, e della Sieve da San Piero a Sieve sino al suo sbocco in Arno, etc.* [*Firenze,*] 1848. folio.
- MANGLES, J. H.** *Interference or Non-interference with Railway Companies.* [Relative to the Regulation of the earnings, working, and distribution of profits of Railway Companies.] *Tract. 8vo. vol. 453.* [*Lond.* 1874.] 8vo.
- MANGON, H.** *Traité de génie rural.—III. Travaux, instruments et machines agricoles.* (Atlas of plates.) *Paris*, 1875. 8vo. and folio.
- MANHATTAN WOOD PRESERVING CO.,** *New York.* Description of the Thilmany Patent for preserving timber. *Tract. 8vo. vol. 402.* *New York*, 1881. 8vo.
- MANILLA.** *El ciclón del 20 de octubre de 1892, etc.* *Tract. 8vo. vol. Manila*, 1892. 8vo.
- MANIQUET, L.** *Traité . . . des machines à vapeur, etc.* 1886. See COSTE, H., and MANIQUET, L.
- MANITOBA.** *Manitoba, en het Noordwesten van Amerika.* *Tract. 8vo. vol. 462.* [*Lond.* 1882.] 8vo.
— *University.* Calendar, 1890, (1891.) *Winnipeg*, 1890, 92. 8vo.
- MANITOBA, Lake.** Report of Surveys made of Lakes Manitoba and Winnipegosis, the Waterhen River and Little Saskatchewan River. *Ottawa*, 1878. 8vo.
- MANLOVE, ALLIOTT, FRYER AND CO.** *On Treating the Refuse of Towns.* *Tract. 8vo. vol. 341.* [*Nottingham*, 1880?] 8vo.
- MANLY, N.S.W.** Report on the Drainage Works at Manly. *Sydney*, 1888. folio.
- MANN, I. J.** *River Bars: notes on the causes of their formation, and on their treatment by "Induced Tidal Scour."* With a description of the successful reduction by this method of the bar at Dublin. *Lond.* 1881. 8vo.
- MANN, J. R.** *On Evaporation, Rainfall, and elastic force of Vapour.* *Tract. 8vo. vol. 282.* [*Lond.*] 1871. 8vo.
- MANN, R. J.** *The Planetary and Stellar Universe.* *Lond.* 1845. 12mo.
- MANN, W.** *A description of a new method of Propelling Locomotive Machines, etc.* *Lond.* 1830. 8vo.
- MANNHEIM.** *Central-güterbahnhof und Hafenanlagen in Mannheim.* [Plan.] Folding in 8vo.

- MANNHEIM—*continued*. Die Mannheimer Hafenanlagen. Zur Erinnerung an den 11 internationalen Binnenschiffahrts-Congress in Wien, 1886. *Tract. 4to. vol. 104. Mannheim, 1886. 4to.*
- *Handelskammer für den Kreis Mannheim.* Jahresbericht, 1887. *Mannheim, 1888. 8vo.*
- MANNING, E. W. The Law of Bills of Exchange, Promissory Notes, bank notes, bankers' notes, drafts, and checks, *etc.* 4th edition. *Tract. 8vo. vol. 67. Lond. 1817. 8vo.*
- MANNING, R. [Five Reports on the Drainage of various districts in Ireland.] *Dublin, 1847. 8vo.*
- Drainage and Navigation, Lough Neagh District. *Dublin, 1884. folio.*
- Sanitary works abroad. 1. Assainissement de la Seine. 2. Assainissement de Berlin. Extracted from the "Annales des Ponts et Chaussées" and translated from the French by R. Manning. *Tract. 8vo. vol. 259. Lond. 1876. 8vo.*
- Tables for calculating the Discharge, Inclination and Dimensions of River Courses and Drains. *Tract. 8vo. vol. 291. Dublin, 1852. 8vo.*
- MANNFELD, C. E. Europa's Eisenbahnen. *Tract. 8vo. vol. 257. Weissen, 1837. 8vo.*
- MANOUG, J. L., *Bey.* De la loi des variations des pentes superficielles des cours d'eau, avec application au Nil pour trouver la retenue aux barrages et le remou au nilomètre. *Tract. 4to. vol. 106. Caïre, 1886. 4to.*
- MANSEL, R. On a fundamental formula in the theory of Steamship Propulsion, *etc.* *Tract. 8vo. vol. Glasgow, 1891. 8vo.*
- On some fundamental principles in Naval Architecture : lectures, *etc.* *Tract. 8vo. vol. 327. Glasgow, 1881. 8vo.*
- On the Law of the Power required for different speeds of the same Steam Vessel : illustrated . . . by a linear scale of their relation. *Tract. 8vo. vol. 314. [Glasgow,] 1879. 8vo.*
- MANSERGH, J. Lower Thames Valley, Brent, and Lea Drainage. High level Northern Route to Sea Reach. *Tract. 8vo. vol. 392. Lond. 1885. 8vo.*
- Report on the Sewerage and Sewage disposal of the proposed Melbourne Metropolitan District, *etc.* *Lond. 1890. folio.*
- See SHONE, I. Critique of Mr. Mansergh's Report on the sewerage of Melbourne. 1891.
- Thirlmere Water Scheme of the Manchester Corporation, and . . . remarks on Water Supply generally. *Tract. 8vo. vol. 296. Queenwood, 1878. 8vo.*
- Water Supply, Prospecting for Water, Well-Sinking and Boring. *Lectures, etc. Chatham, 1882. 8vo.*
- MANSFIELD, C. B., and R. B. Aerial Navigation. *Lond. 1877. 8vo.*

- MANTELL, G. A. Geological excursions round the Isle of Wight and along the adjacent coast of Dorsetshire, *etc.* 8vo. Lond. 1847. 8vo.
- The Geology of the South-east of England. Lond. 1833. 8vo.
- The Wonders of Geology. 3rd edition. 2 vols. Lond. 1839. 12mo.
- MANTELL, R. N. An account of the Strata and Organic Remains exposed in the cuttings of Branch Railway, from the Great Western line near Chippenham, through Trowbridge, to Westbury in Wiltshire. *Tract.* 8vo. vol. 88. Lond. 1850. 8vo.
- MANUEL, G. W. Crank and Screw Shafting in the Mercantile Marine. *Tract.* 8vo. vol. 537. Stratford, [1889.] 8vo.
- MARCELLIS, C., and DUVAL, V. Notice sur un nouveau système de ponts en fonte. *Tract.* 8vo. vol. 54. Liège, 1840. 8vo.
- MARCET, A. On the Specific Gravity and Temperature of Sea-waters, *etc.* *Tract.* 8vo. vol. 19. Lond. 1819. 4to.
(From the Phil. Trans.)
- MARCHAL, D., and WIART, A. C. DE. Chemin de fer de Utrecht à Lattrop. Devis estimatifs pour acquisitions de terrains, *etc.* [MS.] *Tract.* 8vo. vol. 110. Bruzelles, 1856. 4to.
- MARCHAL, E. Annuaire des chemins de fer, 1891, *etc.* See PERIODICAL PUBLICATIONS.
- MARCHESE, E. Cenno sulle ricchezze minerali dell' isola di Sardegna, *etc.* *Tract.* 8vo. vol. 175. Cagliari, 1862. 8vo.
- Détermination pratique de la résistance métallique et de la réaction chimique d'un circuit électrolytique, *etc.* *Tract.* 8vo. vol. 380. Paris, 1884. 8vo.
- Sur le travail mécanique consommé dans l'électrolytisation de quelques sulfures et sels métalliques. *Tract.* 8vo. vol. 384. Paris, 1883. 8vo.
- MARCHETTI, A. S. Raccolta di documenti sul bonificazione delle maremme toscane 1828–1859. *Tract.* 4to. vol. 86. Firenze, 1861. 4to.
- Sulle operazioni idrauliche ed economiche eseguite nel 1859–60 nelle maremme toscane. *Tract.* 4to. vol. 86. Firenze, 1861. 4to.
- MARCHETTI, C. Cenni storici e descrittivi circa al canale Cavour, *etc.* *Tract.* 8vo. vol. 406. Rome, 1880. 8vo.
- Organisirung des Binnenschiffahrts-Betriebes. Wien, 1886. 8vo.
- MARCOARTU, A. DE. The existing Representative System, with regard to the International Question. *Tract.* 8vo. vol. . Glasgow, 1874. 8vo.
- El internacionalismo. *Tract.* 8vo. vol. 426. Madrid, 1884. 8vo.
- On the application of acoustic, optical, electric and maritime Telegraphy to Navigation and Meteorology. *Tract.* 8vo. vol. 229. Bradford, 1873. 8vo.

- MARCOARTU, A. DE—*continued*. The Resources and Progress of Spain during the last fifty years of representative government in connection with the British Empire. *Tract. folio. vol. 39.*
Birmingham, 1886. folio.
- Universal Telegraphic Enterprise. Telegraphic submarine lines between Europe and America, and the Atlantic and Pacific. *Tract. 8vo. vol. 136.*
New York, 1863. 8vo.
- MARCOU, J. M., and J. B. Mapoteca Geologica Americana: a Catalogue of Geological Maps of America (North and South), 1752–1881, in geographic and chronologic order. [*U.S. Geol. Survey. Bulletin No. 7.*]
Washington, 1884. 8vo.
- MARDIGNY, — DE. Mémoire sur les inondations des rivières de l'Ardèche. *Tract. 8vo. vol. 252.*
Paris, 1860. 8vo.
- MARDY COLLIERY. Report on explosion at Mardy Colliery: by A. G. C. Liddell.
Lond. 1886. folio.
- MARÈS, J. B. DE. Avant-projet d'un tunnel reliant les chemins de fer de la France et de l'Angleterre. *Tract. 4to. vol. 62.*
Mons, 1867. 4to.
- MARESTIER, —. Mémoire sur les bateaux à vapeur des États-Unis d'Amérique; précédé du rapport fait à l'Institut sur ce mémoire par MM. Sané, Biot, Poisson et C. Dupin. (Atlas of plates.)
Paris, 1824. 4to. and folio.
- MAREY, E. J. La machine animale: locomotion terrestre et aérienne.
Paris, 1873. 8vo.
- MAREY-MONGE, —. Der kupferne Luftballon. *Tract. folio. vol. 39.*
Leipzig, 1845. folio.
- MARGGRAFF, H. Wasserversorgung, Kanalisation, und Abfuhr, in wirthschaftlicher, sanitätischer, ökonomischer, und technischer Beziehung. Nach den vom Stadtmagistrate Münchens hierüber veröffentlichten Berichten, etc. *Tract. 8vo. vol. 307.*
München, 1879. 8vo.
- MARGOLLÉ, E. Volcanoes and Earthquakes. 1874. See ZURCHER, F., and MARGOLLÉ, E.
- MARGRY, P. Les navigations françaises et la révolution maritime du 14^e au 16^e siècle.
Paris, 1867. 8vo.
- MARIÉ, G. Étude sur la mesure exacte des hautes pressions et sur le frottement des cuirs emboutis des presses hydrauliques, etc.
Paris, 1881. 8vo.
- On the Consumption of Fuel in Locomotives. *Tract. 8vo. vol. 479.*
Lond. 1884. 8vo.
- Les régulateurs dans les distributions d'électricité.
Paris, 1888. 8vo.
- Les régulateurs de vitesse. *Tract. 8vo. vol. 483.*
Paris, 1887. 8vo.

- MARIÉ-DAVY, H. Rapport à la commission permanente du service municipal de climatologie appliquée à l'hygiène de la ville de Paris. *Tract. 4to. vol. 87. Paris, 1880. 4to.*
- MARINDIN, F. A., *Major*. Reports on Forth Bridge. *See FORTH BRIDGE.*
- MARIOTTE, E. Traité du mouvement des eaux et des autres corps fluides, *etc.* *Paris, 1718. 8vo.*
- The Motion of Water and other Fluids . . . translated from the French. Together with a little treatise of the same author, giving practical rules for Fountains, or jets d'eau, *etc.* *Lond. 1718. 8vo.*
- MARK, W. P. Report on the Atocha plant; known in commerce as Esparto, or Spanish Grass. *Tract. 8vo. vol. 208. Malaga, 1865. 8vo.*
- MARKHAM, C. R. A Memoir on the Indian Surveys. *Lond. 1871. 4to.*
- — 2nd edition. *Lond. 1878. 8vo.*
- Statement of the Case of Commander T. A. Hull, Superintendent of Charts at the Admiralty. *Tract. 8vo. vol. 333. Lond. 1879. 8vo.*
- MARKS, E. C. R. Mechanical Engineering Materials: their properties and treatment in construction. *Manchester, 1893. 8vo.*
- Notes on the construction of Cranes and Lifting Machinery. *Lond. 1892. 8vo.*
- MARKS, G. C. Hydraulic Machinery employed in the Concentration and Transmission of Power. *Manchester, 1891. 8vo.*
- MARKS, W. D. An inquiry touching the Law of Condensation of Steam in Single and Compounded Cylinders. *Tract. 8vo. vol. 470. [Philadelphia,] 1884. 8vo.*
- The Limitations of the Expansion of Steam, *etc.* *Philadelphia, 1887. 8vo.*
- The Relative Proportions of the Steam-engine. *Philadelphia, 1879. 8vo.*
- MARLBOROUGH. Results of Meteorological Observations at Marlborough, 1888. *[Marlborough,] 1888. 8vo.*
- MARMION, A. The ancient and modern History of the Maritime Ports of Ireland. 2nd edition. *Lond. 1856. 8vo.*
- MARPLE. The Marple Local Board Gas Act, 1886. *Lond. 1886. folio.*
- MARQUAND, C. Remarks on the different constructions of Bridges, and improvements to secure their foundations, *etc.* *Lond. 1749. 4to.*
- MARQUARD, L. Co-ordinate Geometry applied to Land-Surveying. 2nd edition. *Tract. folio. vol. 41. Cape Town, 1882. folio.*
- MARRAT, W. An Introduction to the Theory and Practice of Mechanics, *etc.* *Boston, 1810. 8vo.*

- MARRIOTT, W. Hints to Meteorological Observers: with Instructions for taking observations and tables, *etc.* Lond. 1881. 8vo.
- 2nd edition. Lond. 1887. 8vo.
- Report on the Meteorology of England for the quarter ending December 31st, 1880, with monthly and yearly Abstracts of Observations made at the Meteorological Society's Second Order and Climatological Stations. *Tract.* 8vo. vol. 474.
Lond. 1880. 8vo.
- MARRYAT, E. L., *Capt.* Specifications, rates, and Notes on Work, *etc.* 2nd edition. Bombay, 1877. 8vo.
- 3rd edition. Bombay, 1883. 8vo.
- 4th edition: by Lieut.-Col. A. R. Seton.
Bombay, 1887. 8vo.
- MARSAUT, J. B. Les caisses de secours et de prévoyance à la Compagnie Houillère de Bessèges, *etc.* Paris, 1889. 8vo.
- Étude sur la lampe de sûreté des mineurs. *Tract.* 8vo. vol. 346.
Alais, 1883. 8vo.
- Miners' Safety Lamps: translated, *etc.* *Tract.* 8vo. vol. 360.
Lond. 1884. 8vo.
- Étude sur le lavage de la houille. *Tract.* 8vo. vol. 315.
Paris, 1878. 8vo.
- Étude sur le lavage de la houille aux mines de Bessèges. *Tract.* 8vo. vol. 343.
Paris, 1880. 8vo.
- MARSDEN, R. Cotton Spinning . . . With an appendix on Steam Engines and Boilers. Lond. 1886. 8vo.
- MARSDEN, T. Billiard Tables, *etc.* *Tract.* 8vo. vol. 385.
1883. 8vo.
- MARSDEN, W. Bibliotheca Marsdeniana philologica et orientalis: a catalogue of books and manuscripts collected with a view to the general comparison of languages and to the study of oriental literature. Lond. 1827. 4to.
- MARSEILLES. Port de Marseille. Mémoire et documents divers sur la construction d'un pont mobile sur la passe de la Joliette.
(Lithographed.) Marseille, 1873. 4to.
- Règlements et tarifs pour la distribution des eaux de Marseille (de Toulouse, de Dunkerque, de Clermont-Ferrand, de Lyon, de Roubaix-Courcoing et de Rouen). *Tract.* 8vo. vol. 430, and folio. vol. 39.
Marseille, *etc.*, 1858-84. 8vo. and folio.
- Statistique du port de Marseille, 1888. Marseille, 1889. 8vo.
- Société Scientifique Industrielle. Bulletin. Vol. 1, (2, *etc.*)
Marseille and Paris, 1872, *etc.* 8vo.
- Decret . . . relatif aux chaudières à vapeur. *Tract.* 8vo. vol. 435.
Marseille, 1880. 8vo.

- MARSEILLES CANAL. Canal de Marseille. Notice sur le pont-aqueduc de Roquefavour. [MS.] *Tract. folio. vol. 1.*
Marseille, 1854. folio.
- Département des Bouches-du-Rhône. Canal de Marseille ; plan et profil de la ligne principale entre la prise et le bassin de Marseille. [1880 ?] *folio.*
- MARSH, J. T., *Capt. R.E.* Lectures on Embankments for retaining water. *Tract. 8vo. vol. 243.* *Chatham, 1865. 8vo.*
- Notes on Wooden and Fire-Proof Floors. [*Chatham Lectures.*] *Chatham, 1878. folio.*
- MARSH, L. Handbook of Rural Sanitary Science. *Lond. 1876. 8vo.*
- MARSH, O. C. Dinocerata : a monograph of an extinct order of gigantic Mammals. [*U.S. Geol. Survey. Monograph X.*] *Washington, 1886. 4to.*
- MARSHALL, H. Contribution to a natural and economical History of the Coco-nut Tree. *Tract. 8vo. vol. 19.* *Edinburgh, 1832. 8vo.*
- MARSHALL, J. A digest of all the Accounts relating to the population, production, revenues, and financial operations of Great Britain and Ireland. *Lond. 1833. 4to.*
- MARSHALL, J. G. B. On the Theory of Mechanics, as applied to works of construction. *Tract. 4to. vol. 32.* [*Lond. 1851.*] *4to.*
- Report on the Sewerage of the District of the Borough of Reading, etc. *Tract. 8vo. vol. 106.* *Reading, 1858. 8vo.*
- MARSHALL, P. P. Report on the best method of dealing with the Sewage of Torquay. *Tract. 8vo. vol. 223.* *Lond. 1872. 8vo.*
- Report to the Tottenham Local Board of Health on the disposal of the Sewage of their District. *Tract. 8vo. vol. 194.* *Lond. 1870. 8vo.*
- MARSHALL, R. An Examination into the respective merits of the proposed Canal and Iron Railway from London to Portsmouth. *Tract. 8vo. vol. 92.* *Lond. 1803. 8vo.*
- MARSHALL, W. The new Water-weed ; *Anacharis Alsinistrum, etc.* *Lond. 1852. 8vo.*
- MARSHALL, W. P. Modern Railways and Railway Travelling. *Tract. 8vo. vol. 470.* *Birmingham, 1888. 8vo.*
- On special points of interest in the American and Canadian Railways. *Tract. 8vo. vol. 393.* *Birmingham, 1884. 8vo.*
- Railway Brakes. *Tract. 8vo. vol. 435.* *Lond. 1887. 8vo.*
- ARTEN, E. B. On Steam-boiler Inspection. *Tract. 8vo. vol. 195.* *Glasgow, 1870. 8vo.*
- Records of Steam-boiler Explosions. *Lond. and Stourbridge, 1869–89. 8vo.*

- MARTEN, H. J.** Address to Section II. of the Sanitary Institute. *Tract. 8vo. vol. 489.* *Lond.* 1889. 8vo.
(From the "Transactions of the Sanitary Institute.")
- On some Water-worn and Pebble-worn Stones taken from the apron of the Holt-Fleet Weir on the River Severn. *Tract. 8vo. vol.* *Lond.* 1891. 8vo.
- Report on Improving the Water Communication between London and Birmingham, etc. *Tract. folio. vol. 45.* *Lond.* 1886. folio.
- The Severn Commission. Preliminary Report, September 15th, 1883. *Tract. folio. vol. 45.* *Worcester,* 1883. folio.
- The Severn Commission. Report, August 24th, 1889. *Tract. folio. vol. 45.* *Worcester,* 1889. folio.
- The Severn Commission. Report . . . upon the past History, present State, and further Improvements of the Navigation of the River Severn, etc. *Tract. folio. vol. 48.* [*Worcester,*] 1892. folio.
- Stafford Corporation Water-works. Report with reference to a proposed new well boring and pumping station. *Tract. folio. vol. 24.* *Wolverhampton,* 1876. folio.
- Wolverhampton Corporation Water-works. Report on the 24-inch bore hole at Coxford. *Tract. folio. vol. 21.* *Wolverhampton,* 1876. folio.
- MARTEN, H. J., AND STILEMAN, F. C.** Report on the drainage of the Boro' of Dudley. *Tract. folio. vol. 21.* *Wolverhampton,* 1876. folio.
- MARTENS, A.** Ueber das Kleingefüge des schmiedbaren Eisens besonders des Stahles. *Tract. 4to. vol. 104.* *Düsseldorf,* 1887. 4to.
- MARTIN, B.** An Essay on Electricity . . . On the Principles of Sir I. Newton's Theory of Vibrating Motion, Light and Fire . . . With some observations relative to the uses that may be made of this wonderful power of nature. *Tract. 8vo. vol. 479.* *Bath,* 1746. 8vo.
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- Le substituant du condenseur à surface. Nouvelle application de la vapeur surchauffée, etc. *Lond.* 1865. 8vo.
- MARTIN, E., and LE GAY, G.** Projet de construction d'un tunnel sous-marin pour l'établissement d'un chemin de fer devant relier la France à l'Angleterre. *Tract. 4to. vol. 62.* *Paris,* 1869. 4to.
- MARTIN, FREDERICK.** The Statesman's Year Book. See PERIODICAL PUBLICATIONS.

- MARTIN, H. The history of Brighton and environs . . . 2nd edition. *Brighton*, 1871. 8vo.
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Lond. [1850?] folio.
- Objections to the Tunnel Sewer, proposed by the Metropolitan Sewage Manure Company; together with an alternative plan. *Tract. 8vo. vol. 83.* *Lond.* 1847. 8vo.
- Outline of a comprehensive plan for diverting the Sewage of London and Westminster from the Thames, and applying it to agricultural purposes, etc. *Tract. 8vo. vol. 83.*
Lond. 1850. 8vo.
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Lond. 1829. 4to.
- Plan for abundantly supplying the Metropolis with pure water from the River Coln. *Tract. 4to. vol. 35.* *Lond.* 1834. 4to.
- Plan for improving the air and water of the metropolis, by preventing the sewage being conveyed into the Thames, etc. *Tract. 4to. vol. 35.* *Lond.* 1832. 4to.
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Lond. 1849. 8vo.
- Report of a Committee of Gentlemen appointed to take into consideration J. Martin's Plan for the Improvement and Conservancy of the River Thames, etc. *Tract. 4to. vol. 16.*
Lond. 1836. 4to.
- Thames and Metropolis improvement Plan. 2 pts. *Tract. 8vo. vol. 83.* *Lond.* 1846, 49. 4to.
- MARTIN, JULES. Analyse de l'ouvrage de MM. Lavoinnie et Pontzen sur les chemins de fer en Amérique, etc. 2 pts. *Tract. 8vo. vol. 534.* *Paris*, 1887, 88. 8vo.
- Les chemins de fer au point de vue de la sécurité. *Tract. 8vo. vol. 531.* *Paris*, 1892. 8vo.
- Considérations générales sur les tarifs de chemins de fer. *Tract. 8vo. vol. 531.* *Paris*, 1890. 8vo.
- Note sur la réduction du rayon des courbes et des alignements droits intermédiaires en pays accidenté. *Tract. 8vo. vol. 532.*
Paris, 1886. 8vo.
- La propriété, etc. *Tract. 8vo. vol. 513.* *Limoges*, 1871. 8vo.
- Quels sont les avantages et les inconvénients qui résultent de la grande vitesse des trains, etc. *Tract. 8vo. vol. 531.*
Paris, 1892. 8vo.

- MARTIN, JULES**—*continued*. La question des chemins de fer d'intérêt local. 3^e édition. *Tract.* 8vo. vol. 531. Limoges, 1888. 8vo.
- Rapport [sur] la question des chemins de fer d'intérêt local. 2^e édition. *Tract.* 8vo. vol. 347. Limoges, 1879. 8vo.
- Sur la stabilité des voies. *Tract.* 8vo. vol. 532. Paris, 1890. 8vo.
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- — Décima edicion. *Tract.* 8vo. vol. 389. Madrid, 1861. 8vo.
- MARTIN, R.** Éléments de mathématiques. Nouvelle édition. Paris, 1802. 8vo.
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- MARTIN, T., B.A.** On the Method of Polar Reciprocation, as applied to theorems of quantity. *Tract.* 8vo. vol. 158. Dublin, 1860. 8vo.
- Some problems connected with the Construction and design of the wing-walls of Bridges. *Tract.* 8vo. vol. 158. Calcutta, 1863. 8vo.
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- Recollections of Canada, 1873. See CARLILE, W. O., and MARTINDALE, B. H.
- MARTINE, G. Essays on the construction and graduation of Thermometers. . . New edition. *Edinburgh, 1792. 12mo.*
- MARTINENQ, B. Guide des calculs de déplacement et de stabilité hydrostatique des navires. *Paris, 1888. 4to.*
- MARTINEZ, A. Reglamento organico del cuerpo de ingenieros de caminos, canales y puertos. *Tract. 8vo. vol. 472.* Madrid, 1864. 8vo.
- MARTINS, C. Des climats de la France et de leur influence sur son agriculture et le génie de ses habitants. *Tract. 8vo. vol. 135.* Versailles, [1860.] 8vo.
- Essai sur la nature et l'origine des différentes espèces de brouillards secs. *Tract. 8vo. vol. 135.* Versailles, [1860.] 8vo.
- Notice préliminaire sur les séries météorologiques correspondantes à celles du Faulhorn et du Mont-Blanc. 1851. See BRAVAIS, A., and MARTINS, C.
- MARTIUS, C. F. P. VON. Denkrede auf A. von Humboldt, etc. *Tract. 4to. vol. 46.* München, 1860. 4to.
- Erinnerung an Mitglieder der mathematisch-physikalische Classe der K. Bayer. Akademie der Wissenschaften, etc. *Tract. 4to. vol. 45.* München, 1859. 4to.
- MARTNER, C. Emploi des chemins de fer pendant la guerre d'Orient, 1876-78. *Tract. 8vo. vol. 302.* Paris, 1878. 8vo.
- MARTYN, J., AND CHAMBERS, E. The Philosophical History Memoirs of the Royal Academy of Sciences at Paris: an abridgement of all the papers relating to Natural Philosophy which have been published by . . . that Society. 5 vols. *Lond. 1742. 8vo.*
- MARVIN, C. The Coming Deluge of Russian Petroleum and bearing on British Trade. *Tract. 8vo. vol. 433.* Lond. 1886. 8vo.
- The Region of Eternal Fire: an account of a journey to petroleum region of the Caspian in 1883. *Lond. 1884. 8vo.*
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- MARY, L. C. Cours de routes et ponts professé à l'École centrale des arts et manufactures. (Atlas of plates.) *Paris, 1873. 4to. and folio.*

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- MAS, F. B. DE.** Recherches expérimentales sur le matériel de la batellerie. 2 pts. in 1 vol. *Paris*, 1891, 93. folio.
- MASCART, E., and JOUBERT, J.** Leçons sur l'électricité et le magnétisme. 2 vols. *Paris*, 1882, 86. 8vo.
- A Treatise on Electricity and Magnetism, etc. 2 vols. *Lond.* 1883, 88. 8vo.
- MASERES, F.** Elements of Plane Trigonometry : with a dissertation on . . . logarithms. *Lond.* 1760. 8vo.
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- The Principles of Mr. Harrison's Time-keeper. *Tract.* 4to. vol. 21. *Lond.* 1767. 4to.
- MASKELYNE, N. S.** On the Connexion of Chemical Forces with the Polarization of Light. *Tract.* 8vo. vol. 188. *Lond.* 1841. 8vo.
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- MASON, MONCK.** Account of the late aeronautical expedition from London to Weilburg, accomplished by R. Holland, Monck Mason, and C. Green, aeronaut. *Tract.* 8vo. vol. 261. *Lond.* 1836. 8vo.

MASON, MONCK—*continued*. Détails sur le voyage aérien de Londres à Weilburg. *Tract. 8vo. vol. 429.* Paris, 1837. 8vo.

MASON, O. T. The Human Beast of Burden. *Tract. 8vo. vol. 497.* Washington, 1889. 8vo.

MASON SCIENCE COLLEGE, Birmingham. Calendar . . . 1880-81, (1882-3, etc.) Birmingham, 1881, etc. 8vo.

MASONI, U. Corso di idraulica teoretica e pratica. Napoli, 1889. 8vo.

MASSA, M. Note sur les locomotives destinées au service de montagne sur la ligne du St. Gothard. *Tract. 8vo. vol. 427.* Turin, 1880. 8vo.

MASSACHUSETTS, *State of*.—[Births, Marriages, and Deaths.] Report to the Legislature of Massachusetts relating to the Registry and Return of Births, Marriages, and Deaths, 1881(–1884). Boston, 1882–85. 8vo.

— [Harbours, etc.] Second annual report of the Board of Harbour Commissioners. *Tract. 8vo. vol. 199.* Boston, 1868. 8vo

— Annual report of the Harbour and Lands Commissioners, for 1880 (1881, etc.). Boston, 1881, etc. 8vo.

— [Health.] First (2nd, etc.) report of the Board of Health of the State of Massachusetts. Boston, 1870, etc. 8vo.

— Manual for the use of the Boards of Health, etc. Boston, 1886. 8vo.

— — [Another edition.] Boston, 1890. 8vo.

— [Railroads.] Annual Report of the Board of Railroad Commissioners, 1870, (1871, etc.) Boston, 1870, etc. 8vo.

— [Water Supply and Sewerage.] Report of the State Board of Health on Water Supply and Sewerage, 1887, (1888.) Boston, 1887, 88. 8vo.

— Report of the State Board of Health upon the Sewerage of the Mystic and Charles River Valleys, January 1889 (1890). 2 pts. Boston, 1889, 90. 8vo.

— Report on Water Supply and Sewerage. 2 vols. Boston, 1890. 8vo.

Part I.—Examinations by the State Board of Health of the Water Supplies and Inland Waters of Massachusetts, 1887–90.

Part II.—Experimental investigations by the State Board of Health upon the Purification of Sewage by Filtration and by Chemical Precipitation; and upon the intermittent Filtration of Water . . . 1888–90.

MASSACHUSETTS INSTITUTE OF TECHNOLOGY. Abstract of the Proceedings of the Society of Arts, 1884–5, (1885–6.) 2 pts. Boston, 1885, 86. 8vo.

— Annual Catalogue of the Officers and Students; with a statement of the Courses of Instructions, 1868–9, (1883–4, 1886–7, etc.) Boston, 1868, 84, etc. 8vo.

— A brief account of its Foundation, character and equipment, etc. *Tract. 4to. vol.* Boston, 1893. 4to.

- MASSACHUSETTS INSTITUTE OF TECHNOLOGY—*continued*.
 President's Report. *Boston*, 1873, 76, 86, *etc.* 8vo.
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Tract. 8vo. *vol.* 512. *Gand*, 1891. 8vo.
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Eng.] *Tract.* 8vo. *vol.* 415. *Lond.* 1880. 8vo.
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 8vo. *vol.* 463. *Lond.* 1884. 8vo.
- MAST, G. C. Linear Drawing : an introduction to technical drawing,
 consisting of 24 plates and a text-book. *Lond.* 1874. 8vo.
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 Proceedings . . . Eighteenth (19th, *etc.*) Annual Convention.
New York, 1884, *etc.* 8vo.
- MASTERMAN, G. F. Seven eventful years in Paraguay.
Lond. 1869. 8vo.
- MASTERS, H. An architect's Letter about Sewer-Gas and House
 drainage. *Tract.* 8vo. *vol.* 307. *Lond.* 1876. 8vo.
- MATHER, J. The Ships and the Gales, and Harbours of Refuge.
Tract. 8vo. *vol.* 524. *Lond.* 1858. 8vo.
- MATHERS, E. P. The Gold-Fields revisited ; being further glimpses
 of the gold-fields of South Africa. *Durban*, 1887. 8vo.
- MATHESON, E. Aid-book to Engineering Enterprise abroad.
 2 vols. *Lond.* 1878–81. 8vo.
- — — 2nd edition. 1 vol. *Lond.* 1889. 8vo.
- The Choice of Machinery for use on Engineering Works and a
 description of various kinds of Cranes. Lectures, *etc.* *Tract.*
 8vo. *vol.* 402. *Chatham*, [1879.] 8vo.
- Cotton Baling Presses : with a description of the accumulator
 cotton press. *Tract.* 8vo. *vol.* 422. *Lond.* 1870. 8vo.
- The Depreciation of Factories, Mines and Industrial Under-
 takings, and their valuation. *Lond.* 1884. 8vo.
- — — 2nd edition. *Lond.* 1893. 8vo.
- Proposed Bridge over the Thames at the Tower. 1885. *See*
 ORDISH, R. M., and MATHESON, E.
- Tramways in Town and Country. *Tract.* 8vo. *vol.* 294.
Lond. 1878. 8vo.
- Vocabulary of Technical Terms used in the design, manufacture
 and commerce of iron structures : English, French, German,
 Italian, Spanish. *Tract.* 8vo. *vol.* 405. *Lond.* 1873. 8vo.
- Works in Iron. Bridge and roof structures. *Lond.* 1873. 8vo.
- — — 2nd edition. With examples of structures made and
 erected by A. Handyside and Co. *Lond.* 1877. 8vo.
- MATHESON, R. E. Report on Surnames in Ireland, *etc.* 1894.
See IRELAND.—[Names.]

- MATHEW, FRANCIS. A Mediterranean Passage by water between the two sea towns Lynn and Yarmouth, upon the two rivers the Little Ouse and Waveney. *Tract. 8vo. vol. 277.*
Lond. 1656. 4to.
- Of the Opening of Rivers for Navigation. The benefit exemplified by the two Avons of Salisbury and Bristol, with a mediterranean passage by water for billanders of thirty tun between Bristol and London. *Tract. 8vo. vol. 282.*
Lond. 1656. 4to.
- MATHEW, FRANCIS, *M. Inst. C.E.* On an Alternative Route to India. *Tract. folio. vol. 32.*
Lond. 1883. folio.
- MATHEWS, E. D. British Guiana and Venezuela. *Tract. 8vo. vol. 454.*
Lond. 1888. 8vo.
- Report to the directors of the Madeira and Mamore Railway Company. *Tract. 8vo. vol. 257.*
Lond. 1875. 8vo.
- Up the Amazon and Madeira Rivers through Bolivia and Peru. *Lond. 1879. 8vo.*
- MATHIEU, E. Théorie de la capillarité. *Paris, 1883. 4to.*
- Théorie de l'électrodynamique. *Paris, 1888. 4to.*
- MATI, T. Canale marittimo di Suez. *Tract. 8vo. vol. 342.*
Firenze, 1870. 8vo.
- MATI, T., and CONTIN, A. Relazione sulla regolarizzazione del porto di Lido. *Tract. folio. vol. 36.*
Venezia, 1874. folio.
- MATIER, W. T. Report . . . on the Drainage and Improvement of the lands in the Kilbride District, Counties of Kilkenny and Tipperary. *Dublin, 1846. 8vo.*
- MATTEUCCI, C. Recherches physiques, chimiques et physiologiques sur la torpille. *Tract. 8vo. vol. 312.*
Paris, 1837. 8vo.
- MATTHEWMAN, F. A. Notes on the efficiency of Gaseous Fuel. *Tract. 8vo. vol. 536.*
Glasgow, 1894. 8vo.
- MATTHEWS, H. Observations on Sound : showing the causes of its indistinctness in churches, halls of justice, &c., with a system for their construction, *etc.* *Tract. 8vo. vol. 380.*
Lond. 1826. 8vo.
- MATTHEWS, WILLIAM. Gas-Lighting Projects : facts demonstrating that some new schemes tend to increase the Local Rates, *etc.* *Tract. 8vo. vol. 492.*
Lond. 1835. 8vo.
- An Historical Sketch of the origin, progress, and present state of Gas-Lighting. *Lond. 1827. 8vo.*
- Hydraulia ; an historical and statistical account of the waterworks of London, and the contrivances for supplying other great cities, *etc.* *Lond. 1835. 8vo.*
- MATTHEWS, WILLIAM, *C.E., F.G.S.* Separate Water Supply for domestic and sanitary Purposes at Southampton.
[Lond. 1891.] folio.
- Southampton Waterworks. 1290–1888. *Tract. 8vo. vol. 456.*
Southampton, 1888. 8vo.

- MATTHEY, F.** Notice sur la forme rationnelle des essieux de wagons pour chemins de fer. *Tract.* 8vo. vol. 260. Paris, 1872. 8vo.
- MATTHIESSEN, A.** On Alloys. *Tract.* 8vo. vol. 158. Lond. 1867. 8vo.
- On the Expansion by Heat of Water and Mercury. *Tract.* 4to. vol. 52. (From the Phil. Trans.) [Lond. 1865.] 4to.
- MATTHYS, H.** Considérations relatives au câble transatlantique, et exposé d'un système dans lequel la pression sur le fil conducteur se trouve écartée. *Tract.* 4to. vol. 45. Anvers, 1860. 4to.
- MATTOS, A. G. DE.** Esboço de um manual para os fazendeiros de assucar no Brazil. *Tract.* 8vo. vol. 345. Rio de Janeiro, 1882. 8vo.
- MAUÁ, — DE, Baron.** Caminho de ferro de D. Isabel, da provincia do Paraná á de Matto-Grosso. Considerações geraes sobre a empreza pelo visconde de Mauá. Relatorio por William Lloyd. Rio de Janeiro, 1875. 4to.
- MAUÁ, — DE, Baron, and OTHERS.** Melhoramento do porto de Pernambuco. *Tract.* 4to. vol. 66. Rio de Janeiro, 1868. 4to.
- MAUCH, J. M. VON.** Vergleichende Darstellung griechischer Bauordnungen. 3 vols. Potsdam, 1832-39. folio.
- MAUDSLAY, J.** Description of patent improved stern Propeller for Steam Vessels. *Tract.* 8vo. vol. 139. [Lond. 1843.] 8vo.
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- MAUDSLAY, SONS AND FIELD.** Portfolio of photographs of Marine Engines, Boilers and Machinery, 1892. Lond. 1892. obl. folio.
- MAULT, A.** The Sanitation of a Mining Settlement. [Lond. 1891.] folio.
- MAUPEOU, L. DE.** Étude relative aux générateurs multitubulaires. *Tract.* 4to. vol. 114. Paris, 1889. 4to.
- Étude relative à l'action de la chaleur sur les parois des chaudières. Pt. 3. *Tract.* 4to. vol. 112. [Paris, 1889.] 4to. (Imperfect, wanting pp. 1 and 2.)
- Étude sur les indicateurs de Watt. *Tract.* 4to. vol. 91. Cherbourg, 1882. 4to.
- Note sur l'emploi des huiles minérales pour le chauffage des chaudières. *Tract.* 4to. vol. 110. Havre, 1882. 4to.
- MAUPERTUIS, P. L. M. DE.** La figure de la terre, déterminée par les observations de Maupertuis, Clairaut, Camus, Le Mounier, et Outhier, accompagnés de Celsius, faites au cercle polaire. Paris, 1738. 8vo.
- The Figure of the Earth determined from observations made at the Polar Circle by Maupertuis and others . . . Translated from the French, etc. Lond. 1738. 8vo.
- MAURICEWOOD COLLIERY.** Report (Supplementary Report) on an Explosion at Mauricewood Colliery. 2 pts. Edinburgh, 1890. folio.

- MAURITIUS. Report on the inundation in Mauritius of the 12th February, 1865. *Port Louis*, 1865. folio.
- Report on the Railways of Mauritius for 1869. *Tract. folio. vol. 9.* *Port Louis*, 1870. folio.
- MAURITZ, J. A. C. Material fluctuante da armada nacional. *Tract. 8vo. vol. 349.* *Rio de Janeiro*, 1882. 8vo.
- MAURIZE, A. Nouveau système de chemin de fer à rails cuirassés et semelles amortissantes. Les rails à rebords, ou banquettes de sûreté contre derailements. *Tract. 8vo. vol. 166.* *Paris*, 1868. 8vo.
- MAURY, M. F. Explanations and Sailing Directions to accompany the Wind and Current Charts. 1853. *See UNITED STATES.—[Navigation.]*
- Letter to Capt. B. Pim on the Physical Geography of the Nicaraguan Railway Route. *Tract. 8vo. vol. 439.* *Lond.* 1866. 8vo.
- Nautical Monographs. No. 1. The Winds at Sea. *Tract. 4to. vol. 45.* *Washington*, 1859. 4to.
- The Physical Geography of the sea. 2nd edition, enlarged, *etc.* *Lond.* 1855. 8vo.
- The Physical Geography of the Sea, and its Meteorology. Being a reconstruction . . . of the eighth edition of "The Physical Geography of the Sea." *Lond.* 1860. 8vo.
- MAUS, H. Rapport sur les études du chemin de fer de Chambéry à Turin, et de la machine proposée pour exécuter le tunnel des Alpes entre Modane et Bardonnèche, *etc.* *Turin*, 1850. folio.
- MAVAUT, O. Note sur l'établissement d'un port en eau profonde et de vitesse sur la côte de Heyst. *Tract. 8vo. vol. 524.* *Gand*, 1892. 8vo.
- MAVER, W., and DAVIS, M. M. The Quadruplex. *New York*, 1885. 8vo.
- MAW, H. L. India. References to "The Canon Law," "Magna Charta," and the "Bill of Rights." Nos. 1 and 2. *Tract. 8vo. vol. 184.* *Liverpool*, 1869. 8vo.
- MAW, W. H. Recent Practice in Marine Engineering. 2 vols. *Lond.* 1883. 4to.
- The Waterworks of London, *etc.* 1867. *See COLBURN, Z., and MAW, W. H.*
- MAW, W. H., and DREDGE, J. Modern Examples of Road and Railway Bridges, *etc.* *Lond.* 1872. folio.
- A Record of the Vienna Universal Exhibition of 1873. (Atlas of plates.) *Lond.* 1874. folio.
(The text is embodied under the title of "Technical Papers upon Special Subjects" in the 2nd volume of the "Reports on the Vienna Universal Exhibition of 1873.")
- MAWE, J. New descriptive Catalogue of Minerals, *etc.* 7th edition. *Lond.* 1826. 8vo.

- MAXTON, JOHN, *Engineer, of Leith*. Description of self-registering Tide-Gauge. *Tract*. 8vo. vol. 65. *Edinburgh*, 1843. 8vo.
- MAXTON, JOHN, *Instructor Royal Nav. Coll. Greenwich*. The Workman's Manual of Engineering Drawing. 6th edition. *Lond.* 1886. 8vo.
- MAXWELL, —, and TUKE, —. Report to the Directors of the St. Anne's-on-the-Sea Land and Building Company upon the Sewage Question: with especial reference to the Pneumatic System. *Tract*. 8vo. vol. 275. *Bury*, 1876. 8vo.
- MAXWELL, J. C. The Scientific Papers of J. C. Maxwell. Edited by W. D. Niven. 2 vols. *Cambridge*, 1890. 4to.
- A Dynamical Theory of the Electromagnetic Field. (From the *Phil. Mag.*) *Lond.* 1865. 4to.
- Illustrations of the Dynamical Theory of Gases. (From the *Phil. Trans.*) [*Lond.* 1860.] 8vo.
- On the Dynamical Theory of Gases. *Lond.* 1867. 4to. (From the *Phil. Trans.*)
- Introductory Lecture on Experimental Physics. *Tract*. 8vo. vol. 219. *Lond. and Cambridge*, 1871. 8vo.
- Matter and Motion. *Lond.* 1882. 8vo.
- On a Method of making a direct comparison of Electrostatic with Electromagnetic Force, etc. *Tract*. 4to. vol. 58. 1868. 4to.
- On Colour Vision. *Tract*. 8vo. vol. 219. 1871. 8vo.
- On Faraday's Lines of Force. *Cambridge*, 1856. 4to.
- On Hills and Dales. *Tract*. 8vo. vol. 219. *Lond.* 1870. 8vo. (From the *Phil. Mag.*)
- On Reciprocal Figures and Diagrams of Forces. (From the *Phil. Mag.*) *Lond.* 1864. 8vo.
- On Reciprocal Figures, Frames, and Diagrams of Forces. *Tract*. 4to. vol. 68. *Edinburgh*, 1870. 4to.
- On the Calculation of the Equilibrium and Stiffness of Frames. (From the *Phil. Mag.*) *Lond.* 1864. 8vo.
- On the Description of Oval Curves, and those having a plurality of foci; with remarks by Prof. Forbes. *Tract*. 8vo. vol. 189. [1860?] 8vo.
- On the Displacement in a case of Fluid Motion. *Tract*. 8vo. vol. 219. [*Lond.* 1870?] 8vo.
- On the Equilibrium of a Spherical Envelope. *Tract*. 8vo. vol. 219. 1867. 8vo.
- On the Equilibrium of Elastic Solids. *Edinburgh*, 1850. 4to.
- On the general Laws of Optical Instruments. [1858.] 8vo.
- On the Mathematical Classification of Physical Quantities. *Tract*. 8vo. vol. 219. *Lond.* [1871.] 8vo.

MAXWELL, J. C.—*continued*. On the Theory of Compound Colours, and the relations of the colours of the spectrum.

(From the Phil. Trans.) Lond. 1860. 4to.

— On the Theory of Rolling Curves. Edinburgh, 1849. 4to.

— On the Theory of the Maintenance of Electric Currents by mechanical work without the use of permanent magnets.

(From the Proc. Roy. Soc.) [Lond. 1867.] 4to.

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— On the Transformation of Surfaces by Bending. Cambridge, 1854. 4to.

— On the Viscosity or internal Friction of air and other Gases. 1866. 4to.

— Theory of Heat. Lond. 1871. 12mo.

— A Treatise on Electricity and Magnetism. 2 vols. Oxford, 1873. 8vo.

— — 3rd edition. 2 vols. Oxford, 1892. 8vo.

— See THOMSON, J. J. Notes on recent Researches in Electricity and Magnetism: intended as a sequel to Prof. Clerk Maxwell's Treatise on Electricity and Magnetism. 1893.

MAXWELL, J. P. On Working Narrow-Gauge Railways with light Traffic in New Zealand. Tract. 8vo. vol. 531. Wellington, 1891. 8vo.

MAXWELL-LYTE, F. Methods of treating and separating the Metals contained in certain complex Ores and Metallic Compounds. Tract. 8vo. vol. 346. Lond. 1882. 8vo.

MAXWELLTOWN. An Act for supplying the Burghs of Dumfries and Maxwelltown and Suburbs with Water. Lond. 1850. folio.

— An Act to explain and amend the Act for supplying . . . Dumfries and Maxwelltown with Water. Lond. 1852. folio.

MAY, G. Ballooning: a concise sketch of its history and principles. Lond. 1885. 8vo.

— Bibliography of Electricity and Magnetism. 1860–83. Lond. 1884. 8vo.

MAY, R. C. A new Method of setting out Railway Curves, by reflecting the angle in a segment; containing a description of the instruments for reflecting the angle, etc. Lond. 1841. 16mo.

MAYALL, J. Cantor Lectures on the Microscope, etc. Lond. 1886. 8vo.

MAYCOCK, W. P. A First Book of Electricity and Magnetism, etc. Lond. 1891. 8vo.

MAYER, J. Observations on the applicability of Gas Light to Madras. Tract. 8vo. vol. 124. Madras, 1857. 8vo.

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Meidling, [1887.] 4to.
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Lond. 1770. 4to.
- MAYNARD, G. W.** *Biographical Notice of S. G. Thomas*. *Tract.*
 8vo. vol. 414. [New York,] 1885. 8vo.
- *Biographical Notice of Sir Wm. Siemens, etc.* *Tract.* 8vo. vol.
 467. [New York,] 1884. 8vo.
- *Report on the Candemeña Mines, Chihuahua, Mexico*. *Tract.* 4to.
 vol. 118. *New York*, 1891. 4to.
- *Report on the property of the Pioche Mining and Reduction
 Company*. *Tract.* 8vo. vol. 525. *New York*, 1890. 8vo.
- *Report on the property of the Alice Gold and Silver Mining
 Company, Butte, Montana*. *Tract.* 4to. vol. 94.
New York, 1882. 4to.
- MAYNARD, H. N.** *Handbook to the Crumlin Viaduct, Monmouth-
 shire; with copious details of the design, dimensions and general
 proportions of the structure, etc.* *Crumlin and Lond.* 1862. 8vo.
- *The Viaduct Works' Handbook, being a collection of examples
 from actual practice of Viaducts, Bridges, Roofs, and other
 Structures in Iron; together with tables of prices, etc.*
Lond. 1868. 8vo.
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 poussée des terres et des murs de revêtement*. *Paris*, 1808. 4to.
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See PERIODICAL PUBLICATIONS.
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 the Central Region of France*. [5th Int. Congr. Int. Nav.]
 [Paris, 1892.] 8vo.
- *Note sur le service de la prévision des crues dans la Loire centrale*.
Tract. 8vo. vol. 494. *Paris*, 1890. 8vo.
- MAZZA, F.** *Delle ruote idrauliche, etc.* 1878. *See BONOLIS, A.,
 and MAZZA, F.*
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Paris, 1806–21. 4to.
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- Railways in Upper India. *Tract.* 8vo. vol. 356.
Lahore, 1884. 8vo.
- The Roorkee Treatise on Civil Engineering. [1st to 3rd editions. 1866–73.] See THOMASON CIVIL ENGINEERING COLLEGE.
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Roorkee, 1865. 8vo.
- | | |
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- MEHRTENS, G.** Eisen und Eisenkonstruktionen in geschichtlicher, hüttentechnischer und technologischer Beziehung, *etc.* [*Handbuch der Baukunde, Abth. I.*] *Berlin, 1887. 8vo.*
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Boston, 1887. 8vo.
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- MEIKLEHAM, R. S.** Descriptive history of the Steam-Engine. By R. Stuart [*pseud.*]. New edition, *etc.* *Lond. 1831. 8vo.*
- Historical and descriptive Anecdotes of Steam-Engines, and of their inventors and improvers. By R. Stuart [*pseud.*].
Lond. 1829. 12mo.
- On the history and art of Warming and Ventilating rooms and buildings, *etc.* By W. Bernan [*pseud.*]. *Lond. 1845. 8vo.*
- MEINI, G.** Il commendatore A. Manetti e le sue opere. *Tract. 8vo. vol. 403.* *Firenze, 1867. 12mo.*
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- MEISSNER, G.** Die Hydraulik. *Jena, 1878. 8vo.*
- Die Walzen-Müllerei und die vortheilhaftesten Vermahlungs-Methoden für Müller und Muhlenbauer. *Jena, 1881. 8vo.*
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- MELBOURNE.** Half-scale Contour Maps of Melbourne and Suburbs.
[.] folio.
z 2

- MELBOURNE—*continued*.—Report on the Extension of Melbourne westward. *Melbourne*, 1887. folio.
- [Exhibition of 1880.] Official Catalogue of Exhibits. 2 vols. *Melbourne*, 1880. 8vo.
- Notices sur les dessins modèles et ouvrages relatifs aux services des Ponts et Chaussées, des Mines, *etc.* *Paris*, 1880. 8vo.
- Notices on the Designs, Models and Works pertaining to the "Ponts et Chaussées," collected by the Ministry of Public Works. Translated by D. Coales. *Paris*, 1880. 8vo.
- List of Awards. *Melbourne*, 1881. folio.
- List of Awards made to Exhibitors from the United Kingdom. *Tract*. 8vo. vol. 355. *Lond.* 1881. 8vo.
- [Public Library of Victoria.] Catalogue of the Melbourne Public Library. *Melbourne*, 1861. 8vo.
- Catalogue of the Public Library of Victoria. 2 vols. *Melbourne*, 1880. 8vo.
- [Roads.] Specification for Stripping, Cutting-down, Forming, Ballasting and Tar-metalling to the extent tinted pink on the plan, for the Municipal Council of the City of Melbourne. Contract work. *Sydney*. folio.
- [Sanitation.] Progress (and Final) Reports of Royal Commission upon the Sanitary condition of Melbourne. *Melbourne*, 1889, 90. folio.
- Report of the City Surveyor (of Sydney) upon the disposal of Refuse, *etc.*, in the Cities of Melbourne and Adelaide. *Tract*. folio. vol. 47. [Sydney, 1891.] folio.
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- MELISURGO, G. C. Ingegnerie sanitaria ed urbana. *Napoli*, 1880. 8vo.
- MELL, P. H. Report on the Climatology of the Cotton Plant. [U.S. Dep. of Agriculture. Weather Bulletin, 8.] *Washington*, 1893. 8vo.
- MELLET, F. S., and HENRY, —. Mémoire sur le chemin de fer de la Loire, d'Andrézieux à Roanne. *Tract*. 8vo. vol. 2. *Paris*, 1828. 8vo.

- MELLING. Report on an accident in the Factory of the Potenti Co. at Melling. By Lt.-Col. A. Ford. *Lond.* 1882. foli
- MELLISS, J. C. Purification of Water-carried Sewage. 1877. *S*
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- Richmond Main Drainage. Proposed Main Sewerage Board ar
plan for dealing with the Sewage of Richmond, Barnes, Mortlak
Kew, and Petersham. *Tract.* 8vo. vol. 490. *Lond.* 1885. 8v
- St. Helena: a physical, historical and topographical descriptio
of the island, *etc.* *Lond.* 1875. 8v
- The Sewage Question solved; or, how to purify our River
Tract. 8vo. vol. 259. *Lond.* 1875. 8v
- MELLO, A. M. DE. Annales meteorologicos do Rio de Janeiro n
annos de 1851 à 1856. *Rio de Janeiro*, 1858. 4t
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Brazil. *Tract.* 4to. vol. 79. *Rio de Janeiro*, 1876. 4t
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rayonnante par différens corps solides et liquides. *Tract.* 8v
vol. 191. [*Paris*, 1833.] 8v
- Nouvelles recherches sur la transmission immédiate de la chaleur
rayonnante, *etc.* *Tract.* 8vo. vol. 191. [*Paris*, 1833.] 8v
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les lois de l'écoulement et du choc du gaz en fonction de l
température, par M. Hirn. Rapport de M. Melsens. *Tract.* 8v
vol. 437. *Bruzelles*, 1885. 8v
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Railways, as well as cheaper. 3rd edition. *Tract.* 8vo. vol. 70.
Lond. 1846. 8v
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Mineralogy of the Pacific Coast. [*U.S. Geol. Survey*, Bulletin
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Oder, Elbe, Weser und Rhein. *Berlin*, 1888. 8v
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Deutschland und Oesterreich mit besonderer Beziehung au
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Bangor, [1826.] 8v

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- Observations on the application to Parliament for an act for building a timber bridge over the Streights of Menai, *etc.* *Tract.* 4to. vol. 13. [1817?] 4to.
- Papers relating to the building a Bridge over the Menai Strait near Bangor Ferry, *etc.* *Lond.* 1819. folio.
- Report, dated 20th November, 1886, by Mr. Baker, on the condition of the Menai Bridge. *Lond.* 1890. folio.
- Return showing the total cost per annum of the Repairs and Maintenance. *Lond.* 1886. folio.
- Short state of the case of the land-owners, merchants, tradesmen, and mariners of the county of Carnarvon, in opposition to the Menai bridge bill. *Tract.* 4to. vol. 13. [1817?] 4to.
- Sketch of a plan for building a timber bridge across the river Menai, *etc.* *Tract.* 8vo. vol. 14. *Lond.* 1786. 8vo.
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- Gravity Research: determination of Gravity with half-second pendulums on the Pacific Coast, in Alaska and at Washington and Hoboken. [*U.S. Coast and Geodetic Survey. Appendix No. 15. Report for 1891.*] *Washington*, 1892. 8vo.
- MENDES GUERREIRO, J. V. Le Tage portugais. [*5th Int. Congr. Int. Nav.*] [*Paris*, 1892.] 8vo.
- MENGIN-LECREULX, —. The Tidal Seine. [*5th Int. Congr. Int. Nav.*] [*Paris*, 1892.] 8vo.
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- Inter-Oceanic Canal Projects. *Tract.* 8vo. vol. 451. [New York, 1879.] 8vo.
 (From Trans. Am. Soc. C.E.)
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- MENZIES, W. A treatise on the sanitary Management and Utilisation of Sewage, *etc.* *Lond.* 1865. 4to.

- MERCADIER, E.** *Traité élémentaire de télégraphie . . . 1^{re} partie. Télégraphie électrique : appareils simples et systèmes de communications usuels. 2^e édition.* *Paris, 1883. 8vo.*
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Lond. 1863. 8vo.
- — 4th edition, revised . . . With an appendix by G. W. Usill.
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Exeter, 1869. 8vo.
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- Iron Truss Bridges for Railroads. Methods of calculating strains, with a comparison of the most prominent truss bridges, and new formulas for bridge computations, *etc.* *New York*, 1870. 4to.
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- On the Theory and Calculations of Continuous Bridges.
New York, 1876. 12mo.
- The Strength and Weathering Qualities of Roofing Slates. *Tract.* 8vo. vol. 508. *New York*, [1892.] 8vo.
 (From Trans. Am. Soc. C.E.)
- A Text-book of Retaining Walls and Masonry Dams.
New York, 1892. 8vo.
- A Text-book on the Mechanics of Materials and of beams, columns and shafts. *New York*, 1885. 8vo.
- — Key to the Text-book on the Mechanics of Materials, *etc.*
New York, 1886. 8vo.
- A Treatise on Hydraulics. *New York*, 1889. 8vo.
- MERRY, W. R. Report on Mr. Merry's claims [in regard to a contract with the Government of Victoria for the construction of the Geelong and Ballarat Railway]. *Melbourne*, 1878. folio.
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- MERSEY, *River*. Act for altering an act passed in [1767] . . . for making the Rivers Mersey and Irwell navigable from Liverpool to Manchester, *etc.*
Lond. 1794. folio.

MERSEY, River—*continued*. Charter of the Mersey, 1861, 1871 and 1881. 3 vols. 1861–81. folio.

— [Discussions at the Royal Victoria Gallery of Practical Science, Manchester, on January 28th, February 11th, 18th and 25th, 1841, on the Improvement of the Mersey and Irwell navigation.] *Tract*. 8vo. vol. 71. [Lond. 1841.] 8vo.

(From the Annals of Electricity.)

— The high and low water features of the River Mersey between the Rock Lighthouse, Bootle Bay, Garston and Eastham [for the years 1842, 45, 47 and 52 (by Lieut. W. Lord), and 1857 (by Lieut. M. T. Parks)]. [Liverpool, 1842–57?] 8vo.

— Map of the Mersey and Irwell, and their tributaries, 1877. Rivers Pollution Prevention Act, 1876. 1877. 8vo.

— Mersey and Irwell Watershed. Proceedings of the Joint Committee, 1891–92 (1893). [With Reports on the Treatment of Manufacturers' Waste Waters, *etc.*, by R. F. Tatton.] 2 vols. Preston, 1893, 94. 8vo.

— Report from the Mersey Inquiry Committee to the meeting of the British Association at Cheltenham, 1856. *Tract*. 8vo. vol. 102. (From the Report of the British Association.) Lond. 1856.

— Report on an Inquiry into the suitability of the existing position of the Gunpowder Magazines on the River Mersey (with minutes of evidence and appendices). By Col. V. D. Majendie. Lond. 1890. folio.

— Reports (1844, 53, 68, 70, 75, 79, *etc.*) on the present State of the Navigation of the river Mersey. *Tract*. 8vo. vols. 71, 102, 212, 169, and 252. Lond. 1844–79, *etc.* 8vo.

MERSEY AND DELORAINE RAILWAY. Engineer's Report with plans and estimates. Hobart Town, 1875. folio.

— Mr. Watson's Report on Terminus at Port Frederick. Hobart Town, 1880. folio.

MERSEY RIVER, Tasmania. Report on Entrance to Mersey River (Devonport): by C. W. Bell. [Hobart,] 1890. folio.

MERSEY TUNNEL. Programme for the ceremony of opening the Mersey Tunnel Railway by . . . the Prince and Princess of Wales, *etc.* Lond. 1886. 4to.

MERTH, L. Tabellen zur Berechnung der Querschnittsflächen der Auf- und Abträge von variablen Planiebreiten für Strassen und Eisenbahnkörper. *Tract*. folio. vol. 25. Wien, 1873. folio.

MERWIN, H. C. The Patentability of Inventions. Boston, 1883. 8vo.

MESA, P. A. DE. Reconocimiento hidrológico del valle del Guadalquivir (del Ebro). 2 pts. Madrid, 1864, 65. 4to.

- MESSENT, P. J. Aberdeen Graving Dock. Report as to cause of Damage, . . . November 24th 1887. *Tract. folio. vol. 41.* 1887. folio.
- Aberdeen South Breakwater Report, 14 September, 1885. *Tract. folio. vol. 41.* 1885. 8vo.
- Description of the Improvements of the River Tyne. *Tract. 4to. vol. 112.* Lond. 1887. 4to.
- Description of Works by the Tyne Improvement Commissioners, with Chart of the River Tyne. *Tract. 4to. vol. 86.* Newcastle-upon-Tyne, 1881. 4to.
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- METCALF, W. On Natural Gas. *Tract. 8vo. vol. 400.* Pittsburgh, 1884. 8vo.
- Some Wastes of Heat. *Tract. 8vo. vol. 468.* [Pittsburgh,] 1881. 8vo.
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 „ 16. Report of the third meeting of the International Meteorological Committee held at Paris, September 1885. *Lond.* 1887. 8vo.
 „ 17. Report of the fourth meeting of the International Meteorological Committee, Zürich, September 1888. *Lond.* 1889. 8vo.

- Daily Weather Reports, 1872, *etc.* *Lond.* 1872, *etc.* folio.
 — Hourly Readings, 1874, *etc.* *Lond.* 1874, *etc.* folio.
 — Quarterly Weather Reports, 1869, *etc.* *Lond.* 1871, *etc.* 4to.
 — Weekly Weather Reports. *Lond.* 1880, *etc.* folio.
 — Monthly Weather Report, 1884, *etc.* *Lond.* 1884, *etc.* 4to.

METEOROLOGICAL SOCIETY. *See* ROYAL METEOROLOGICAL SOCIETY.

METEOROLOGICAL SOCIETY OF GREAT BRITAIN. Transactions. Vol. 1. *Lond.* 1839. 8vo.

METEYARD, E. The Life of Josiah Wedgwood, from his private correspondence and family papers. 2 vols. *Lond.* 1865. 8vo.

METHVEN, C. W. Sketches of Greenock and its Harbours in 1886. *Greenock*, 1886. 4to.

METIUS, A. Primum mobile, astronomice, sciographice, geometrice, et hydrographice, nova methodo explicatum. Editio nova, ab innumeris mendis vindicata, et instrumentis mathematicis aucta à G. Blaeu. 4 vols. in 1. *Amsterdami*, 1632-33. 4to.

METROPOLITAN BOARD OF WORKS. *See* LONDON.—METROPOLITAN BOARD OF WORKS.

METROPOLITAN PAROCHIAL WATER SUPPLY ASSOCIATION. Supply of water to the Metropolis. The case of the ratepayers and consumers stated by the executive committee of the Metropolitan Parochial Water Supply Association. *Tract.* 8vo. vol. 109. *Lond.* 1850. 8vo.

METROPOLITAN RAILWAY. Minutes of Evidence on the Metropolitan District Railway Bill. *Lond.* 1870. folio.
(Incomplete.)

— Minutes of Evidence on the Metropolitan and Metropolitan District Railway Companies Bill. *Lond.* 1879. folio.

— The Metropolitan Railway and its Prospects. By a Proprietor. *Tract.* 8vo. vol. . 1875. 8vo.

— Metropolitan, Metropolitan District, and St. John's Wood Railways. Report of Interview with the Chancellor of the Exchequer on the subject of Passenger Duty on the. *Tract.* 8vo. vol. . *Lond.* 1873. 8vo

— Report of the Committee of Investigation, appointed [by the] shareholders. *Tract.* 8vo. vol. . *Lond.* 1872. 8vo.

— Reports of Proceedings at Meetings of the Company, 1873-75. 8 pts. *Tract.* 8vo. vol. . *Lond.* 1873-75. 8vo.

— Report by the Board of Trade . . . on the Classification of Merchandise Traffic and schedule of maximum Rates, etc. *Lond.* 1891. folio.

METROPOLITAN SEWAGE MANURE COMPANY. Analysis of Evidence given before the Health of Towns Commission, and the select Committee of the House of Commons, on metropolitan sewage manure . . . With prospectus, etc. *Tract.* 8vo. vol. 83. *Lond.* 1846. 8vo.

— A copy of a statement . . . by Messrs. J. Smith, C. Fowler, W. C. Mylne and T. Clark. *Lond.* 1846. folio.

- METROPOLITAN WORKING CLASS ASSOCIATION, for improving the Public Health. *Manual of Public Health and Domestic Economy.* Pt. 1. *Tract.* 8vo. vol. 83.
Lond. 1847. 8vo.
- METZGER, A. *Bibliotheca historico-naturalis physico-chemica et mathematica, oder systematisch geordnete Uebersicht der in Deutschland und dem Auslande auf dem Gebiete der gesammten Naturwissenschaften und der Mathematik neu erschienenen Bücher.* 1874-77. *Göttingen*, [1875-78?] 8vo.
- MEULEN, R. VAN DER. *Bibliografie der technische kunsten en werkschappen.* 1850-75. *Amsterdam*, 1876. 8vo.
- MEUNIER-DOLLFUS, C. *Recherches sur la combustion de la houille.* [1875?] *See* SCHEUCHER-KESTNER, A., and MEUNIER-DOLLFUS, C.
- MEUSE, *River.* *La Meuse. Études faites par ordre du gouvernement belge. Rapport . . .* 1839. *Bruxelles*, 1840. folio.
- MEWBURN, F., *Jun.* *Impressions of the International Exhibition of 1862.* *Tract.* 8vo. vol. 178. *Durham*, [1862?] 8vo.
- MEXICO. *Memoria presentada al Congreso de la Union por el Secretario de Estado y del Despacho de Fomento, Colonizacion, Industria y Comercio de la Republica Mexicana.* 5 vols. (*Atlas of plates.*) *México*, 1887. 4to. and folio.
- *The Ordinances of the Mines of New Spain; translated from the original Spanish. With observations upon the mines and mining associations: by C. Thomson.* *Lond.* 1825. 8vo.
- MEY, P. DE. *L'Escaut maritime.* [5th *Int. Congr. Intl. Nav.*] [Paris, 1892.] 8vo.
- *Étude sur le régime de la côte de Belgique et sur les moyens d'améliorer les ports de ce littoral.* *Brussels*, 1885. 4to.
- *On the mode of establishment and maintenance of Ports on sandy coasts liable to deposits of Silt.* [2nd *Int. Mar. Congr.*] [Lond. 1893.] 8vo.
- MEYER, A. *Locomotives à douze roues couplées par groupes indépendants de six du système Meyer . . . 2^e édition.* *Tract.* 8vo. vol. 13. *Bruxelles*, 1871. folio.
- MEYER, C. *L'arte di restituire à Roma la tralasciata navigazione del suo Tevere.* *Roma*, 1685. folio.
- MEYER, C. J. A. *On the Lower Greensand of Godalming, etc.* *Tract.* 8vo. vol. 474. [Lond.] 1868. 8vo.
- MEYER, E. VON. *Traité sur la poudre, etc.* 1878. *See* UPMANN, J., and MEYER, E. VON.
- MEYER, F. A. *Die neuen Filteranlagen für die Wasserversorgung Hamburgs, etc.* *Tract.* 4to. vol. 120. *München*, 1893. 4to.
- *Reisebericht über künstliche centrale Sandfiltration.* 1877. *See* GRAHN, E., and MEYER, F. A.

- MEYER, F. A.—*continued*. Das Wasserwerk der freien und Hansestadt Hamburg unter besonderer Berücksichtigung der in den Jahren 1891–93 ausgeführten Filtrationsanlage. *Hamburg*, 1894. folio.
- MEYER, F. J., and WERNIGH, W. Steam Towing on Rivers and Canals, by means of a submerged cable. *Lond.* 1876. 8vo.
- MEYER, GEORG. Grundzüge des Eisenbahn-Maschinenbaues, etc. 3 vols. *Berlin*, 1883–86. 8vo.
- MEYER, GUSTAV. Über eine neue Methode der Anlage und des Betriebes geneigter Ebenen für Schiffstransporte. *Tract.* 8vo. vol. 280. *Berlin*, 1877. 8vo.
- MEYER, H. C. Water-Waste Prevention: its importance and the evils due to its neglect, etc. *New York*, 1885. 8vo.
- MEYER, J. Les chemins de fer de la Suisse occidentale au point de vue spécial de la construction. *Tract.* 8vo. vol. 317. *Lausanne*, 1878. 8vo.
- Mémoire sur la stadia topographique et son application aux levés de plans et aux études de chemins de fer, routes, canaux, etc. *Tract.* 8vo. vol. 450. *Paris*, 1885. 8vo.
- Traversée du Simplon par un chemin de fer. *Tract.* 8vo. vol. 383. *Paris*, 1883. 8vo.
- MEYER, J. G. A. Modern Locomotive Construction. *New York*, 1892. 4to.
- MEYER, L. Modern Theories of Chemistry. Translated from the German, etc. *Lond.* 1888. 8vo.
- MEYSEY-THOMPSON, Sir H. S. Sir H. S. Meysey-Thompson, Chairman of the North Eastern Railway, as a man of business. *Lond.* 1874. 8vo.
- MICALI, G. Monumenti inediti a illustrazione della storia degli antichi popoli italiani. (Atlas of plates.) *Firenze*, 1844. 8vo. and 4to.
- MICHAEL, W. H. The Sanitary Acts: comprising the Sewerage Utilization Act, 1865, and Sanitary Act, 1866. *Lond.* 1867. 8vo.
- MICHAEL, W. H., and WILL, J. S. The Law relating to Gas and Water, including all legislation to the close of last session of Parliament. *Lond.* 1884. 8vo.
- MICHAELIS, R., and GORDON, J. Die Canallisation der Stadt Dortmund. *Tract.* 8vo. vol. 309. *Dortmund*, 1878. 8vo.
- MICHAËLIS, W. Die hydraulischen Mörtel insbesondere der Portland-Cement. *Leipzig*, 1869. 8vo.
- Magnesiahaltiger Portland-Cement. *Tract.* folio. vol. 43. *Berlin*, 1888. folio.
- Die Prüfung der hydraulischen Bindemittel auf ihre Luftbeständigkeit. *Tract.* 8vo. vol. 477. *Berlin*, 1889. 8vo.

- MICHAËLIS, W.—*continued*. Die Prüfung der hydraulischen Bindemittel auf Volumbeständigkeit durch die Kochprobe oder mittels warmer Bäder. *Tract. folio. vol. 43. Berlin, 1889. folio.*
- Ueber das Verhalten des Portland-Cementes am Stefans-Dom. [Two papers.] *Tract. folio. vol. 43. [Vienna, 1889?] folio.*
- Ueber geschmolzenen Portland-Cement. 2 pts. *Tract. 4to. vol. 120. Berlin, 1892-93. 4to.*
- Ueber magnesiahaltigen Portland-Cement. *Tract. 8vo. vol. 477. Berlin, 1888. 8vo.*
- Das Wesen und der Erhärtungs-Process des Portland-Cements. *Tract. 4to. vol. 106. Berlin, 1887. 4to.*
- Zur Beurtheilung des Cementes. *Tract. 8vo. vol. 330. Berlin, 1876. 8vo.*
- Zur Kenntniss des gemischten Portland-Cementes. *Tract. 8vo. vol. 477. Berlin, 1888. 8vo.*
- Zur "Verfälschung" des Portland-Cements. *Tract. folio. vol. 43. 1882. folio.*
- MICHEL, D., and Co. Notice sur le ciment de la Valentine, ses avantages, etc. *Tract. 8vo. vol. 366. Marseilles, 1860. 8vo.*
- MICHELL, S. Mine Drainage, being a complete and practical treatise on direct-acting underground steam-pumping machinery. *Lond. 1881. 8vo.*
- MICHELL, T. Explanation of an improved Method for Working Pumps, etc. *Tract. 8vo. vol. 229. Lond. [1850?] 8vo.*
- MICHELOT, P. Expériences sur la résistance des matériaux à l'écrasement. 3 pts. *Tract. 8vo. vols. 181 and 242. Paris, 1863-71. 8vo.*
- MICHELOT, P., and BOUSSON, A. Observations sur les chemins de fer d'Angleterre. *Tract. 8vo. vol. 238. Paris, 1845. 8vo.*
- MICHELOTTI, F. D. Sperimenti idraulici principalmente diretti a confermare la teorica e facilitare la pratica del misurare le acque correnti. *Torino, 1767. 4to.*
- MICHELOTTI, J. T. Ensayo hydrografico do Piemonte; traduzido pello F. Furtado de Mendonça. *Roma, 1803. 4to.*
- MICHIGAN.—*Mining School*. Report of the Director of the Michigan Mining School, Houghton, Michigan, 1886-1891, (1890-92.) *Marquette and Lansing, 1891-93. 8vo.*
- *University*. Calendar. Session 1874-75, (1877-78, etc.) *Ann Arbor, 1875, etc. 8vo.*
(1879-80 and 1881-82 wanting.)
- MICHIGAN CENTRAL RAILROAD COMPANY. Switch Layouts. 2 vols. *[Detroit, 1890?] folio and 8vo.*
- MIDDLE LEVEL. See BEDFORD LEVEL.
- MIDDLESBOROUGH, Kentucky. Middlesborough to date. *Tract. folio. vol. 46. 1890. obl. 8vo.*

- MIDDLESBOROUGH, Kentucky**—*continued*. Reprint of Letters written in America, representing the progress and prospects of Middlesborough and Cumberland Gap, *etc.* *Tract. folio. vol. 46.*
[*Lond.* 1890.] obl. 8vo.
- **Souvenir of Middlesborough, Kentucky (U.S.A.).** October, 1890. *Tract. 8vo. vol. 491.* *Louisville,* 1890. 8vo.
- MIDDLESEX.** Act for improving the Roads in the County of Middlesex. *Lond.* 1789. folio.
- **Report of the Committee of Magistrates respecting the bridges in the county of Middlesex.** *Lond.* 1826. 4to.
- MIDDLETON, E. E.** New Process of measuring the height of the Sun. *Tract. 8vo. vol. 245.* *Lond.* 1874. 8vo.
- MIDDLETON, G. A. T.** Surveying and Surveying Instruments. *Lond.* 1894. 8vo.
- MIDDLETON, R. E.** The Forth Bridge. A Paper, *etc.* *Tract. 8vo. vol. 443.* *Lond.* 1887. 8vo.
- **House Drainage, Sewerage and Ventilation, etc.** *Tract. 8vo. vol. 325.* *Lond.* [1881.] 8vo.
- **Opening Address of the President of the Civil and Mechanical Engineers' Society . . . 1887.** *Tract. 8vo. vol. 448.* *Lond.* 1888. 8vo.
- **Opening Address as President of the Civil and Mechanical Engineers' Society . . . 1888.** *Tract. 8vo. vol. 467.* *Lond.* 1888. 8vo.
- **Portland Cement.** *Tract. 8vo. vol. 354.* *Lond.* 1882. 8vo.
- **The Removal of Sewage after leaving Buildings.** [*Lond.* 1891.] folio.
- **Triangulation and Measurements at the Forth Bridge.** *Lond.* 1887. 8vo.
- **Water Supply for Small Towns and Villages. A Paper, etc.** *Tract. 8vo. vol. 482.* *Lond.* 1889. 8vo.
- MIDLAND ASSOCIATION OF GAS MANAGERS.** [Reports of the Annual and Quarterly Meetings, 1878–84.] [*Lond.* 1878–84?] 8vo.
- MIDLAND INSTITUTE OF MINING, CIVIL AND MECHANICAL ENGINEERS.** Reports of the Committee upon Safety-Lamps. Experiments made at Aldwarke Main Colliery, February 14th, March 1st, March 10th, and May 10th, 1884. *Tract. 8vo. vol. 447.* *Barnsley,* 1884. 8vo.
- **Transactions.** Vol. 1, *etc.* *Newcastle,* 1858, *etc.* 8vo.
- MIDLAND MINING COMMISSION.** First Report (with Evidence). South Staffordshire. [By T. Tancred.] *Lond.* 1843. folio.
- MIDLAND OF WESTERN AUSTRALIA LAND AND RAILWAY COMPANY.** Notes on the proposed Railway and District. *Tract. 4to. vol. 110.* *Lond.* [1885?] 4to.

- MIDLAND RAILWAY. Copy of Circular letter, 20 Sept., 1880, by the Board of Trade to the Railway Companies relative to Accidents that occurred on the Midland Railway and on the North British Railway, and the Interlocking of Points and Signals, and the answers thereto. *Lond.* 1881. folio.
- (Rates and Charges.) Provisional Order. Bill (Amended Bill). *Lond.* 1891. folio.
- Midland and Great Western Railway Companies' Clifton Extension Joint Railway. Report by the Board of Trade on the Classification of Merchandise Traffic and Schedule of Maximum Rates. *Lond.* 1891. folio.
- Specifications for Railway Carriages and Locomotives. *Lond.* 1880–81. 8vo.
- See RENNIE, G. Report on the Midland Counties Railway. 1833.
- MIDLOTHIAN WATER CO. Prospectus. *Tract. folio. vol. 26.*
[*Edinburgh*, 1872 ?] folio.
- MIEBZSCH, H. Geologie der Kohlenlager. *Leipzig*, 1875. 8vo.
- MIÉGE, B. Guide pratique de télégraphie électrique, ou vade-mecum pratique à l'usage des employés des lignes télégraphiques, etc. *Paris*, [1865 ?] 12mo.
- MIFFLIN, S. W. Methods of Location, or modes of describing and adjusting Railway Curves and Tangents, as practised by the engineers of Pennsylvania. *Philadelphia*, 1837. 12mo.
- MIHATSCH, C. Der Bau der Wiener Kaiser Franz Josefs-Hochquellen-Wasserleitung. (Atlas of plates.) *Wien*, 1881. 4to. and folio.
- MIKONUI. Mikonui Water Race, Westland. Report to the N. Z. Houses of Assembly. *Hokitika*, 1875. folio.
- MILAN. Osservazioni sulla forma delle rotaje per la progettata strada in ferro da Milano a Como, e proposta di radicali variazioni alle medesime: con tav. in rame. *Tract. 8vo. vol. 67.*
Milano, 1837. 8vo.
- *Collegio degli Ingegneri ed Architetti.* Atti. Vol. 1, (2, etc.) *Milano*, 1868, etc. 8vo.
- [*Congress of Engineers and Architects.*] Primo Congresso degli ingegneri ed architetti Italiani in Milano. Atti. (Atlas of plates.) *Milano*, 1873. 8vo. and folio.
- [*Exhibition of 1881.*] Cenni monografici sui singoli servizi dipendenti da Ministero dei lavori pubblici per gli anni 1878–80, compilati in occasione dell' Esposizione Nazionale di Milano. *Roma*, 1881. folio.
- Conferenze sulla Esposizione Nazionale del 1881, etc. *Milano*, 1881. 8vo.

- MILAN.—[*Exhibition of 1881*—*continued*. Esposiz. Indus. Ital. del 1881 in Milano. Sezione IV. ; ingegneria, lavori pubblici, ecc. Da C. Clericetti. *Tract.* 8vo. vol. 355. *Milano*, 1883. 8vo.
- *Reale Istituto Lombardo*. See REALE ISTITUTO LOMBARDO.
- *Regio Istituto Tecnico Superiore*. Programma 1863–64 to 1868–69, 1887–88, etc. *Milano*, 1863, etc. 8vo.
- *Società anonima del tramway Milan-Gorgonzola-Vaprio*. Relazioni dall'assemblea generale degli azionisti per l'esercizio 1879. *Tract.* 8vo. vol. 340. *Milano*, 1880. 8vo.
- MILFORD HAVEN. Observations on Milford Haven. 2nd edition, etc. [By Pembrocensis.] *Lond.* 1812. 8vo.
- — [Large paper copy.] *Lond.* 1812. 4to.
- Remarks on the pre-eminent natural advantages of Milford as the western terminal port to the railways of Great Britain. *Tract.* 8vo. vol. . *Lond.* 1847. 8vo.
- Report from the Select Committee on the Milford Haven Communication. *Lond.* 1827. folio.
- MILIZIA, F. Memorie degli architetti antichi e moderni. Terza edizione. 2 vols. *Parma*, 1781. 8vo.
- MILLAR, JOHN. Address on the proposed Burke and Willis Group of Statuary, etc. *Tract.* 4to. vol. 70. *Melbourne*, 1862. 4to.
- Engineering Report on Dunedin and Port Chalmers Railway, 1869. See DUNEDIN AND PORT CHALMERS RAILWAY.
- Report addressed to the Corporation of Melbourne, explanatory of a "Design for an Abattoir," for the City, etc. *Tract.* 4to. vol. 31. *Melbourne*, 1859. 4to.
- Report on Ship-canal or "Tidal Harbour" and Docks, for the Port of Melbourne, with proposed extension of the city westward. *Tract.* 4to. vol. 70. *Melbourne*, 1860. 4to.
- Reports on Virginia Lake, New Zealand, as a Water Supply for the Boro' of Wanganui. *Tract.* folio. vol. 18. *Wanganui*, 1873. folio.
- Victorian Trades' Hall and Literary Institute. Inaugural Address on the presentation of a design for a permanent hall. *Tract.* 4to. vol. 70. *Melbourne*, 1860. 4to.
- MILLAR, W. J. An Introduction to the Differential and Integral Calculus, with examples of application to mechanical problems. *Lond.* [1885.] 8vo.
- Modern Steam Practice and Engineering. 1883. See WIN-
TON, J. G., and MILLAR, W. J.
- Note on the Reactive Influence of Steam, etc. *Tract.* 8vo. vol. 529. *Glasgow*, 1893. 8vo.
- On the Dimensions of Cast Iron at various Temperatures, with more especial reference to the phenomena of the solid floating on the molten metal. *Tract.* 8vo. vol. 466. [Edinburgh,] 1881–82. 8vo.

- MILLAR, W. J. — *continued*. On the influence of Oil on Waves at Sea. *Tract. 8vo. vol. 535.* [1893.] 8vo.
- On the Mechanical Transmission of Sound by Wires and on simple forms of Microphone Receivers. *Tract. 8vo. vol. 329.* [Glasgow, 1880.] 8vo.
- Paper on some properties of Cast-Iron and other Metals. *Tract. 8vo. vol. 421.* [Glasgow,] 1886. 8vo.
- Principles of Mechanics and their application, with special reference to the steam engine. *Lond. 1874. 8vo.*
- Studies in Physical Science. *Lond. 1878. 8vo.*
- MILLARD, J. A Letter to the Right Hon. T. S. Rice, M.P., containing a plan for the better management of the British Museum. *Tract. 8vo. vol. 19.* *Lond. 1836. 8vo.*
- MILLE, A. A. Ligne de Paris à Brest. Réseau d'Orléans. Profil géologique. *Paris, 1867. folio.*
- Ligne de Paris à Brest. Section de Rennes à Brest. Profil géologique. *Paris, 1865. folio.*
- Rapport sur le mode d'assainissement des villes en Angleterre et en Écosse. *Tract. 4to. vol. 53.* *Paris, 1854. 4to.*
(Plates wanting.)
- MILLE, A. A., and DURAND-CLAYE, A. Compte-rendu des essais d'utilisation et d'épuration. (Service municipal des travaux publics de la ville de Paris; service d'essai des eaux d'égoût.) (Atlas of plates.) [Paris, 1870.] folio and 4to.
(Lithographed.)
- Compte-rendu des travaux et des résultats, etc. (Service municipal des travaux publics de la ville de Paris; service des eaux d'égoût.) (Atlas of plates.) [Paris, 1870.] folio and 4to.
(Lithographed.)
- MILLE, A. A., and THORÉ, —. Ligne de Paris à Brest. Section de Paris à Rennes. Profil géologique. *Paris, 1864. folio.*
- Ligne du Mans à Angers. Profil géologique. 1863. folio.
- MILLER, D. Belfast Harbour: report, etc. 1862. See BELL, R. B., and MILLER, D.
- MILLER, D. J. Chicago Cable Roads. A Paper, etc. *Tract. 8vo. vol. 463.* 1882. 8vo.
- MILLER, E. Report on the improvement of the Schuylkill Navigation, etc. *Tract. 8vo. vol. 71.* Philadelphia, 1845. 8vo.
- MILLER, HORATIO. Measure for Money. A few facts relating to the introduction of the average meter system in Paddington. *Tract. 8vo. vol. 248.* *Lond. 1825. 8vo.*
- MILLER, HUGH. The Cruise of the Betsey, or a summer holiday in the Hebrides . . . 7th edition. *Edinburgh, 1869. 8vo.*
- Edinburgh and its Neighbourhood, geological and historical; with the geology of the Bass Rock. 2nd edition. *Edinburgh, 1869. 8vo.*

- MILLER, HUGH—*continued*. Footprints of the Creator, or the Asterolepis of Stromness. With memoir by Louis Agassiz. 11th edition. *Edinburgh*, 1869. 8vo.
- The Old Red Sandstone; or, new walks in an old field. To which is appended a series of geological papers, *etc.* *Edinburgh*, 1859. 8vo.
- Sketch-book of Popular Geology. 3rd edition. *Edinburgh*, 1869. 8vo.
- The Testimony of the Rocks; or, Geology in its bearings on the two theologies, natural and revealed. *Edinburgh*, 1869. 8vo.
- MILLER, JOHN, *Civil Engineer*. [For joint Reports by J. Miller and T. Grainger:] See GRAINGER, T., and MILLER, J.
- MILLER, JOHN, *Town Clerk of Perth*. Observations as to the powers of the Magistrates and Town Council of the City of Perth, in regard to the navigation of the river Tay. *Tract*. 8vo. vol. 6. *Perth*, 1833. 8vo.
- Suggestions as to the course proper to be adopted by the Magistrates and Town Council of the City of Perth in exercising their powers in regard to the navigation of the river Tay. *Tract*. 8vo. vol. 6. *Perth*, 1833. 8vo.
- MILLER, JOHN F. On the Meteorology of the Lake District of Cumberland and Westmoreland; including the results of experiments on the fall of rain at various heights above the earth's surface, *etc.* [Second paper.] (From Phil. Trans.) *Lond.* 1849. 4to.
- On the Meteorology of the Lake District of Cumberland and Westmoreland, *etc.* [Fourth paper.] *Tract*. 4to. vol. 40. (From Phil. Trans.) *Lond.* 1851. 4to.
- On the Relation of the Air and Evaporation Temperatures to the Temperature of the Dew-point, as determined by Mr. Glaisher's hygrometrical tables, *etc.* *Tract*. 4to. vol. 40. *Lond.* 1851. 4to.
- Synopsis of Meteorological Observations made at Whitehaven, Cumberland, in the year 1849, (1850.) *Tract*. 8vo. vols. 193 and 99. *Edinburgh*, 1850, 51. 8vo.
- Synopsis of Meteorological Observations made at . . . Whitehaven, Cumberland, in the year 1852; including some remarks on the fall of rain in the English lake district. *Tract*. 8vo. vol. 110. *Edinburgh*, 1853. 8vo.
- Synopsis of the Fall of Rain in the English Lake and Mountain District in the year 1851. *Tract*. 8vo. vol. 99. *Whitehaven*, 1852. 8vo.
- MILLER, S. A. A description of some Lower Carboniferous Crinoids from Missouri. [*Geol. Survey of Missouri*. Bulletin No. 4.] *Jefferson City*, 1891. 8vo.
- MILLER, S. H., and SKERTCHLY, S. B. J. The Fenland, past and present. *Wisbeach*, 1878. 8vo.

- MILLER, T. L. Efficiency of Gas-Engines. *Tract.* 8vo. vol. 492.
Liverpool, 1890. 8vo.
- Factors of Safety. *Tract.* 8vo. vol. 491.
[Liverpool], 1890. 8vo.
- MILLER, W. Decimal Tables used at the Bank of England for reducing the gross weight of gold and silver to standard, according to the assay reports. *Lond.* 1854. 4to.
- MILLER, WILLIAM A. Elements of Chemistry: theoretical and practical. 4th edition. 3 vols. *Lond.* 1867–69. 8vo.
- Introduction to the study of Inorganic Chemistry.
Lond. 1871. 12mo.
- MILLER, WILLIAM A., HOFFMANN, A. W., and FRANKLAND, E. Report on tenders for the supply of Perchloride of Iron, and on Drs. Odling and Letheby's observations on its use as a deodorising agent. *Tract.* 8vo. vol. 133. *Lond.* 1860. 8vo.
- Report on the use of Lime as a Disinfectant of Sewage. *Tract.* 8vo. vol. 133. *Lond.* 1860. 8vo.
- MILLER, WILLIAM HALLOWS. A Treatise on Crystallography.
Cambridge and Lond. 1839. 8vo.
- MILLER, WILLIAM HENRY, *Maj.-Gen.* A letter . . . vindicating the right of Patrick Miller of Dalswinton to be regarded as the first inventor of practical Steam Navigation. *Tract.* 8vo. vol. 219.
Lond. 1862. 8vo.
- MILLER, WILLIAM V. Plan for propelling Ships by Submerged Propellers amidships. *Tract.* 8vo. vol. 111. *Lond.* 1857. 8vo.
- MILLERET, J. Des moyens d'établir dans l'espace de 6 à 7 années un réseau complet de rail-ways en France. 4^e édition. *Tract.* 8vo. vol. 81. *Paris*, 1841. 8vo.
- MILLERS, G. A Description of the Cathedral Church of Ely . . . 3rd edition. *Lond.* 1834. 8vo.
- MILLET DE CHALES, F. C. F. The Elements of Euclid, *etc.* [From the French of F. C. F. Milliet de Chales.] 1720. *See* EUCLID.
- MILLINGTON, J. Elements of Civil Engineering.
Philadelphia, 1843. 8vo.
- MILLIS, C. T. Metal-Plate Work: its patterns and their geometry. Also notes on Metals, *etc.* *Lond.* 1887. 8vo.
- Technical Instruction for Metal Plate Workers, *etc.* *Tract.* 8vo. vol. 480. *Lond.* 1888. 8vo.
- MILLS, E. J. Destructive Distillation: a manualette of the paraffin, coal tar, rosin oil, petroleum and kindred industries.
Edinburgh, 1877. 8vo.
- *See* GROVES, E. C., and THORPE, W. Chemical Technology . . . Vol. 1. Fuel and its applications: by E. J. Mills and F. J. Rowan. 1889.
- MILLS, H. F. Typhoid Fever in its relation to Water-Supplies. *Tract.* 8vo. vol. 516. *[Boston, Mass. ? 1891 ?]* 8vo.

- MILLS, J. H. Heat; science and philosophy of its production and application to the Warming and Ventilation of Buildings. 2 vols. *Boston, Mass.*, [1890.] 8vo.
- MILLS, W. H. Breaking experiments on Cast Iron Sleepers. (MS.) *Derby*, 1857. folio.
- Table showing the results of experiments made at Derby by Mr. W. H. Mills for Mr. P. W. Barlow, upon various descriptions of timber prepared by Dr. Boucherie's patent process for preserving wood from decay, 1856. *Tract.* 8vo. vol. 101. *Lond.* 1856. 8vo.
- MILNE, JAMES. The Elements of Architecture. 2 vols. (Vol. 2 wanting.) *Edinburgh*, 1812. 4to.
- MILNE, JOHN. Observations on the Tidal Currents at Leith; with Plans for the Improvement of the Port, &c. *Tract.* 8vo. vol. 18. *Edinburgh*, 1835. 8vo.
- [Another edition.] (Plans for the Improvement of the Port at Leith; with observations on the Tidal Currents; . . . 2nd edition.) *Tract.* 8vo. vol. 13. *Edinburgh*, 1835. 8vo.
- A Practical View of the Steam-engine; with an account of a mercurial statical dynamometer, &c. [*Fr.* and *Eng.*] *Edinburgh*, 1830. 8vo.
- MILNE, JOHN, F.R.S. Earth Tremors in Central Japan. *Tract.* 8vo. vol. 45. [*Yokohama*, 1887.] 8vo.
- Earthquake Effects, emotional and moral. *Tract.* 8vo. vol. 450. [*Yokohama*, 1887.] 8vo.
- Earthquakes and other Earth Movements. *New York*, 1886. 8vo.
- The Miner's handbook, &c. *Lond.* 1893. 12mo.
- On a Seismic Survey made in Tokio in 1884 and 1885. *Tract.* 8vo. vol. 434. [*Yokohama*, 1887.] 8vo.
- On Construction in Earthquake Countries. *Tract.* 8vo. vol. 450. [*Yokohama*, 1887.] 8vo.
- (From Min. Proc. Inst. C.E.)
- MILNE, JOHN, F.R.S., and BURTON, W. K. The Great Earthquake in Japan, 1891. *Yokohama*, 1891. folio.
- MILNE-EDWARDS, A. See EDWARDS, A. M.
- MILNER, A. England in Egypt. New [5th] edition. *Lond.* 1894. 8vo.
- MILTON, J. T. The Influence of the Board of Trade rules for Boilers upon the Commercial Marine, with discussion. *Tract.* 4to. vol. 110. [*Lond.*] 1883. 4to.
- Report on Cast Steel for Crank Shafts, &c. 1882. See PARKER, W., and MILTON, J. T.
- MILWARD, A. The Decimal Coinage. A Letter to the Rt. Hon. the Chancellor of the Exchequer, advocating . . . the issue of a five-farthing piece. *Tract.* 8vo. vol. 119. *Lond.* 1853. 8vo.
- MILWAUKEE. Milwaukee Waterworks. Reports on the trial of duty and capacity of the Pumping Engines. *Tract.* 8vo. vol. 326. 1875. 8vo.

- MINARD, C. J. Cours de construction des ouvrages hydrauliques des ports de mer. *Paris*, 1846. 4to.
- Cours de construction des ouvrages qui établissent la navigation des rivières et des canaux. (Atlas of plates.) *Paris*, 1841. 4to.
- MINARY, E. Gazogène à vent forcé et scories liquéfiées, système E. Minary. *Tract.* 4to. vol. 97. *Paris*, [1886.] 4to.
- MINASI, F. J. An Appendix to Evidence, before the Royal Commission on Decimal Coinage, etc. *Tract.* folio. vol. 6. *Lond.* 1857. folio.
- Decimal Coinage. *Tract.* 8vo. vol. 158. *Lond.* 1855. 8vo.
- Decimal Coinage: a Word in behalf of the poor man's penny, etc. *Tract.* 8vo. vol. 172. *Lond.* 1854. 8vo.
- MINCHIN, G. M. A Treatise on Statics, etc. *Lond.* 1877. 8vo.
- — 3rd edition. 2 vols. *Oxford*, 1884-86. 8vo.
- MINERS' ASSOCIATION OF CORNWALL AND DEVON. [Proceedings.] *Falmouth*, 1864-84. 8vo.
(Now "Mining Association and Institute of Cornwall," which see.)
- MINES, J. F. Rapid Transit and its effect upon Broadway Real Estate. *Tract.* 8vo. vol. 435. [*New York?*] 1884. 8vo.
- MINING ASSOCIATION AND INSTITUTE OF CORNWALL. Transactions. Vol. 1, etc. *Camborne*, 1887, etc. 8vo.
- MINING ENGINEERS, *Federated Institution of.* See FEDERATED INSTITUTION OF MINING ENGINEERS.
- MINING INSTITUTE OF CORNWALL. Proceedings. Vol. 1, 1877-83. *Redruth*, [1877-84.] 8vo.
(Now "Mining Association and Institute of Cornwall," which see.)
- MINING INSTITUTE OF SCOTLAND. Transactions. Vol. 1, etc. *Hamilton*, 1879, etc. 8vo.
(First vol. called "Trans. West of Scotland Mining Institute.")
- Mining Exhibition, under the auspices of the Mining Institute of Scotland, held at . . . Glasgow . . . September, 1885. Official Catalogue of Exhibits. *Hamilton*, 1885. 8vo.
- Report, relative to the Mining Exhibition held in Glasgow, September, 1885. *Tract.* 8vo. vol. 410. *Hamilton*, 1886. 8vo.
- MIRE, A. DE. Exposé des travaux de la chambre de commerce de Rouen pendant les années 1849, 1850, 1851 et 1852. *Tract.* 8vo. vol. 156. *Rouen*, 1853. 8vo.
- MIRÖSEVIC, H. Resultate aus den meteorologischen Beobachtungen . . . zu Pola, etc. 1882. See KNEUSEL-HERDLICZKA, E., and MIRÖSEVIC, H.
- MISSISSIPPI, *River.* [Annual Report of the Mississippi River Commission for 1882.] [*Washington*, 1884.] 8vo.
- [Documents concerning the Improvement of the South Pass of the Mississippi River, and the payment of \$500,000 to James B. Eads.] [*Washington*, 1877.] 8vo.

- MISSISSIPPI, River**—*continued*. Inspection of the Improvement of South Pass of the Mississippi River. *Washington*, 1882-83. 8vo.
- [Report from the Select Committee on Transportation Routes to the Seaboard on the works at the South Pass of the Mississippi River.] *[Washington, 1879.]* 8vo.
 - Report of a commission upon the works of the South Pass of the River Mississippi. *Tract. 8vo. vol. 291. Washington*, 1876. 8vo.
 - [Report of the Board appointed to make plans and estimates for the construction and maintenance of a navigable channel at the mouth of the Mississippi River.] *Tract. 8vo. vol. 252. [Washington, 1875.]* 8vo.
 - [Report of the Board of Officers appointed to examine the works in progress of construction by J. B. Eads, at the mouth of the Mississippi River.] *[Washington, 1879.]* 8vo.
 - Report of the Commission of Engineers appointed to investigate and report a permanent plan for the reclamation of the alluvial basin of the Mississippi River subject to inundation. *Washington*, 1875. 8vo.
 - [First to tenth Report upon the improvement of South Pass of the Mississippi River.] *[Washington, 1875-78.]* 8vo.
 - [Report relating to the work of Mr. Eads at South Pass, Mississippi River.] *Tract. 8vo. vol. 291. [Washington, 1878.]* 8vo.
 - [Statement from J. B. Eads relative to work executed at the South Pass of the Mississippi River, etc.] *[Washington, 1878.]* 8vo.
- MISSOURI.**—*Geological Survey.* Biennial Report of the State Geologist. *Jefferson City*, 1891. 8vo.
- Bulletins of the Geological Survey. Nos. 2-5. *Jefferson City*, 1890-91. 8vo.
 - Preliminary Report on the Iron Ores and Coal Fields from the Field Work of 1872. *New York*, 1873. 8vo.
 - Reports on the Geological Survey . . . 1855-1871. By G. C. Broadhead, F. B. Meek, and B. F. Shumard, etc. *Jefferson City*, 1873. 8vo.
- MISSOURI VALLEY AND BLAIR RAILWAY AND BRIDGE CO.** Specifications for Superstructure of Bridge over the Missouri River. *Tract. folio. vol. 44.* 1882. folio.
- MITCHAM.** Report on an Explosion that took place at Pain's Firework Factory, May 16th, 1885. *Lond.* 1885. folio.
- Report by Col. V. D. Majendie on an Explosion of Firework Composition at Pain's Firework Factory near Mitcham, June 4th, 1889. *Lond.* 1889. folio.
 - Report on an Explosion of Fireworks at Mr. J. Pain's Firework Factory, near Mitcham. By Col. V. D. Majendie. *Lond.* 1890. folio.

- MITCHAM RESERVOIR, *S. Australia*. [Official.] Estimate.
[Adelaide,] 1878. folio.
- MITCHELL LIBRARY, *Glasgow*. Report, 1880, (1881, *etc.*)
Glasgow, 1881, *etc.*
- MITCHELL, A., and SON. Description of a Patent Screw-pile Battery
and Lighthouse. *Tract. 8vo. vol. 72.* *Belfast*, 1843. 8vo.
- MITCHELL, D. W. Letter as to Drainage of the Regent's Park.
Tract. folio. vol. 7. *Lond.* 1848. folio.
- MITCHELL, E. Engineering Education at home and abroad.
Tract. 8vo. vol. 355. *Lond.* 1882. 8vo.
- MITCHELL, H. On the Reclamation of Tide-lands, and its relation
to Navigation. *Tract. 4to. vol. 68.* [Washington, 1871?] 4to.
- Tides and Tidal Phenomena: for the use more particularly of
U.S. naval officers. *Tract. 8vo. vol. 199.*
Washington, 1868. 8vo.
- MITCHELL, JAMES. A Dictionary of Chemistry, Mineralogy, and
Geology, *etc.* *Lond.* 1823. 8vo.
- First Lines of science, *etc.* *Lond.* 1827. 8vo.
- MITCHELL, JOHN. Manual of Practical Assaying, intended for the
use of metallurgists, captains of mines, and assayers in general.
With copious tables . . . 2nd edition. *Lond.* 1854. 8vo.
- — 3rd edition. Edited by W. Crookes. *Lond.* 1868. 8vo.
- On the Extraction of the Precious Metals, by means of Mitchell's
patented amalgamating machinery. (Appendix.) *Tract. 8vo.*
vol. 101. *Lond.* 1858. 8vo.
- MITCHELL, JOSEPH. A new mode of constructing the Surface of
the Streets and the Thoroughfares of London and other great
cities. 2nd edition. *Lond.* 1870. 8vo.
- On the construction and works of the Highland Railway.
1867. 8vo.
- — Atlas of Photographs. *1865.* folio.
- Plan for lessening the Taxation of the Country. [By J. Mitchell.]
1860. See ANONYMOUS.
- Practical Suggestions for relieving the overcrowded Thoroughfares
of London; securing improved means of locomotion; diverting
the sewage from the Thames. *Tract. 8vo. vol. 198.*
Lond. 1857. 8vo.
- Reminiscences of my Life in the Highlands. 2 vols.
Lond. 1883–84. 8vo.
- MITCHELL, O. M. The Planetary and Stellar Worlds.
Lond. 1850. 8vo.
- MITFORD, Rev. J. "The Britton Testimonial." *Tract. 8vo.*
vol. 115. [Lond.] 1846. 8vo.

- MITGAU, L. Bericht über die in Berlin, Amsterdam, Rochdale, Manchester, Croydon, Leamington und Abingdon eingeführten Systeme der Städtereinigung, unter Mitwirkung von Blasius, Clauss, Gebhard, Landauer, etc. *Tract. 8vo. vol. 325.*
Braunschweig, 1880. 8vo.
- MITIS, J. E. von. Die Carls-Brücke, oder Beschreibung der ersten Stahl-Ketten-Brücke in Wien, etc. *Tract. 8vo. vol. 14.*
Wien, 1829. 8vo.
- Die Sophienbrücke, oder beschreibende Darstellung der ersten Ketten-Brücke in Wien, etc. *Tract. 8vo. vol. 394.*
Wien, 1826. 8vo.
- MITRE Y VEDIA, E. La navegacion entre el puerto de Buenos Aires y el Parana de Las Palmas por un canal lateral del Rio de la Plata. *Tract. 8vo. vol. 521.* Buenos Aires, 1893. 8vo.
- MITTERMAIER, P. Gutachten über die Canalisation der Stadt Dortmund. *Tract. 8vo. vol. 309.* Dortmund, 1878. 8vo.
- MIXA, A. Neue Forderanlage im k. k. Werner-Schachte zu Joachims-
thal. Wassersäulen-Reversir-Maschine mit variabler Füllung,
system Ph. Mayer. *Tract. 4to. vol. 106.* Wien, 1884. 4to.
- MOERMAN, C. Traité des constructions civiles ou mémorial vade
mecum des entrepreneurs, architectes-métreurs, etc.
Paris, 1876. 12mo.
- MOFFAT, W. B. A Letter to the Right Hon. the Earl of Carlisle
on the supply of Pure Water to the Metropolis. *Tract. 8vo. vol. 83.*
Lond. 1849. 8vo.
- MOGG, E. Mogg's new Map of the Country twenty-four miles round
London. Lond. 1817. 12mo.
- MOHAWK AND HUDSON RAILROAD CO. The first Steam
Railroad Passenger Train in America. *Tract. 8vo. vol. 234.*
[Boston, 1870.] 8vo.
- MOHN, H. Études sur les mouvements de l'atmosphère, 1876–80.
See GULDBERG, C. M., and MOHN, H.
- MOHR, E. Die Stauanlage in der Spree bei Charlottenburg im Zuge
der canalisirten Unterspree. *Tract. folio. vol. 39.*
Berlin, 1886. folio.
- Wehranlage bei Charlottenburg. (Drawings.) 1885. folio.
- MOHR, O. Beitrag zur Theorie des Fachwerkes. *Tract. 4to. vol. 96.*
[1885.] 4to.
- Ueber die Bestimmung und die graphische Darstellung von
Trägheitsmomenten ebener Flächen. *Tract. 4to. vol. 105.*
[1887.] 4to.
- Ueber die Verwerthung der Wöhler'schen Versuche für die
Dimensionirung der Eisenconstructions, insbesondere der eisernen
Brücken. *Tract. 4to. vol. 109.* [Leipzig, 1881.] 4to.
- Ueber Geschwindigkeitspläne und Beschleunigungspläne, etc.
Tract. 4to. vol. 108. [Leipzig, 1888.] 4to.

- MOHS, F. *Treatise on Mineralogy*. Translated from the German. 3 vols. *Lond.* 1825. 8vo.
- MOIGNO, F., *Abbé*. *Cosmos*. See PERIODICAL PUBLICATIONS. *Leçons de calcul différentiel et de calcul intégral, redigées d'après les méthodes . . . de M. A. L. Cauchy*. Tome 1. *Paris*, 1840. 8vo.
- *Les Mondes*. See PERIODICAL PUBLICATIONS.
- *Stéréoscope, ses effets merveilleux*. *Pseudoscope, ses effets étranges*. *Tract.* 8vo. vol. 193. *Paris*, 1852. 8vo.
- *Traité de télégraphie électrique, comprenant son histoire, sa théorie, ses appareils . . . 2^e édition*. *Paris*, 1852. 8vo.
- MOINOT, I. *Levés de plans à stadia*. *Notes pratiques pour études de tracés*. 3^e édition revue, etc. *Paris*, 1877. 8vo.
- MOIR, E. W. *A New Theory of the Disease due to Compressed Air*. *Tract.* 4to. vol. 120. *New York*, 1891. 4to.
- MOISSENET, L. *Études sur les filons du Cornouailles*. *Tract.* 4to. vol. 71. *Paris*, 1873. 4to.
- *Observations on the rich Parts of the Lodes of Cornwall*. Translated from the French by J. H. Collins. *Lond. and Truro*, 1877. 8vo.
- *Traitement de la galène au four Galois*. *Notice sur les usines à plomb de Pontesford près Shrewsbury, etc*. *Tract.* 8vo. vol. 136. *Paris*, 1862. 8vo.
- MOISY, —. *Les fontaines de Paris anciennes et nouvelles, etc*. *Paris*, 1812. folio.
- MOITHEY, L. *Dictionnaire hydrographique de la France, ou nomenclature des fleuves, canaux, &c. . . 2^{me} édition*. *Paris*, 1803. 8vo.
- MOLERA, E. J. *On the Recent Progress in Electricity*. *Tract.* 8vo. vol. 415. *San Francisco*, 1885. 8vo.
- MOLESWORTH, Miss C. *The Cobham Journals, Abstracts and Summaries of Meteorological and Phenological Observations made 1825–50: with introduction, tables, &c., by Miss E. A. Ormerod*. *Lond.* 1880. 8vo.
- MOLESWORTH, Sir G. L. *Abstract of Proposals for the Formation of a Volunteer Engineer Corps for India*. *Tract.* folio. vol. 419. *Simla*, 1885. folio.
- *On the Establishment of an Engineer Volunteer Corps for India*. *Tract.* 8vo. vol. 419. *Calcutta*, [1885.] 8vo.
- *Bi-metallic Currency*. *Tract.* 8vo. vol. 421. *Simla*, 1886. 8vo.
- *The Depreciation of Silver, its causes and remedy*. *Tract.* 8vo. vol. 425. *Singapore*, 1886. 8vo.
- *The Divorce of Silver and Gold*. *Tract.* 8vo. vol. 513. *Lond.* 1891. 8vo.

- MOLESWORTH, Sir G. L.—*continued*. Imperialism and Free Trade.
2nd edition. *Tract. 8vo. vol. 412.* Lond. 1886. 8vo.
- Indian Currency : a paper submitted to the American Academy
of Political and Social Science. *Tract. 8vo. vol. 513.*
Philadelphia, [1893.] 8vo.
- Land as Property. *Tract. 8vo. vol. 410.* Lond. 1885. 8vo.
- Masonry Dams for Reservoirs. *Tract. 8vo. vol. 249.*
Calcutta, 1874. 8vo.
- Note on High Masonry Dams, with translation by M. Bouvier
on the calculations of resistance in high masonry dams. *Tract.*
folio. vol. 42. Roorkee, 1883. folio.
- Metrical Tables. Lond. 1880. 8vo.
- Molesworth's Ratchet Dredger. *Tract. 8vo. vol. 251.*
[Roorkee,] 1874. 8vo.
- Note on Iron Manufacture by private enterprise [in India].
Tract. folio. vol. 47. 1882. folio.
- Pocket-book of useful Formulæ and Memoranda for Civil and
Mechanical Engineers. Lond. 1863. 16mo.
- — 17th edition, revised, etc. Lond. 1871. 16mo.
- — 18th edition, with a . . . contribution on Telegraphs by
R. S. Brough. Lond. 1876. 16mo.
- — 19th edition, with a . . . contribution on Telegraphs by
R. S. Brough and Paget Higgs. Lond. 1879. 16mo.
- — 22nd edition. Lond. 1890. 16mo.
- — 23rd edition. Lond. 1893. 16mo.
- Political Economy in its relation to Strikes. *Tract. 8vo. vol. 486.*
[Lond. 1890.] 8vo.
- Report on State Railways in India. *Tract. folio. vol. 16.*
1872. folio.
- Report on Madras Harbour. *Tract. folio. vol. 32.*
Calcutta, 1882. folio.
- Report on the "Abt System" of Ascending Steep Inclines.
Tract. folio. vol. 40. Roorkee, 1886. folio.
- Report on the Festiniog Railway. *Tract. folio. vol. 9.*
Lond. 1871. folio.
- Report on the Gauge of State Railways, 1873. See INDIA.—
[*Railways.*]
- Reports on Light Railways, (and Tramways.) 1870. See
INDIA.—CEYLON.—[*Railways.*] and [*Tramways.*]
- Reports on the Public Works Department, Ceylon, for the years
1867 and 1868. *Tracts. folio. vol. 16.* Colombo, 1868–9. folio.
- Silver and Gold : the Money of the World, etc.
Manchester, 1891. 8vo.

- MOLESWORTH, Sir G. L.—*continued*. The Silver Question. *Tract.* 8vo. vol. 421. Calcutta, 1886. 8vo.
- Text-book of Bi-Metallism. *Tract.* 8vo. vol. 415. Lond. 1886. 8vo.
- MOLESWORTH, Sir G. L., and DOWSON, J. E. Decimal Coinage. Weights and Measures popularly explained. *Tract.* 8vo. vol. 497. Lond. 1890. 8vo.
- MOLINOS, L. La navigation intérieure de la France, *etc.* Paris, 1875. 8vo.
- MOLINOS, L. and BOVET, A. DE. Traction of Boats on Canalised Rivers. Towage by chain or by steam-tugs. [5th Int. Congr. Int. Nav.] [Paris, 1892.] 8vo.
- MOLINOS, L., and PRONNIER, C. Traité théorique et pratique de la construction des ponts métalliques. (Atlas of plates.) Paris, 1857. 4to. and folio.
- MOLL, C. L., and REULEAUX, F. Die Festigkeit der Materialien, namentlich des Guss- und Schmiedeisens. *Tract.* 8vo. vol. 101. Braunschweig, 1853. 8vo.
- MÖLLER, G. An Essay on the Origin and Progress of Gothic Architecture . . . Translated from the German. Lond. 1824. 8vo.
- Memorials of German Gothic Architecture; with notes by W. H. Leeds, to which are added tables of continental lineal measures. Lond. 1836. 8vo.
- MÖLLER, H. C. V. The Construction of a Breakwater at the Free Port of Copenhagen and a short description of this harbour. [2nd Int. Mar. Congr.] [Lond. 1893.] 8vo.
- MOLLET, J. Hydraulique physique, *etc.* Lyon, 1810. 8vo.
- MOLLIER, R. Das Wärmediagramm (Entropie-Temperatur-Diagramm). *Tract.* 4to. vol. 116. Berlin, 1893. 4to.
- MOLONG, N.S.W. Report relating to the proposed Railway from Molong to Parkes and Forbes. Sydney, 1890. folio.
- MOLYNEUX, W. The Conservancy of Rivers. *Tract.* 8vo. vol. 406. Burton-on-Trent, 1879. 8vo.
- The old River Courses and the recent Floods of the Trent Valley at Burton-on-Trent. *Tract.* 8vo. vol. 406. Burton-on-Trent, 1876. 8vo.
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- MONCEAU, D. DU. De l'exploitation des bois, ou moyens de tirer un part avantageux des taillis, demi-futaies et hautes-futaies, *etc.* 2 vols. Paris, 1764. 4to.

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MONCEL, T. DU, Count. See **DU MONCEL**.

MÖNCH, E. Konstruktion der Diagramme von Mehrcylinder-Dampfmaschinen. *Tract.* 4to. vol. 114. [Berlin, 1890.] 4to.

MONCRIEFF, A. The Moncrieff System applied by hydropneumatic gun-carriages to harbour defences. *Tract.* 8vo. vol. 409.
Lond. 1884. 8vo.

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Edinburgh, 1818–20. 4to.

MONDESIR, P. DE. Calcul des ponts métalliques à poutres droites et continues. 2^e édition. Paris, 1873. 4to.

MONDESIR, P. DE, and OTHERS. New Mode of applying Compressed Air to Ventilation and to various other purposes. *Tract.* 4to. vol. 63.
Lond. [1870?] 4to.

MONESTIER-SAVIGNAT, A. Étude sur les phénomènes, l'aménagement, et la législation des eaux au point de vue des inondations, *etc.*
Paris, 1858. 8vo.

MONET, A. The Regime of Ports of Inland Navigation. [5th Int. Congr. Int. Nav.] Paris, 1892. 8vo.

MONET, A. L. Les machines et appareils typographiques en France et à l'étranger, suivi des procédés d'impression. Paris, 1878. 8vo.

MONETA, P. Report of a survey executed . . . to determine the feasibility of extending the Central Argentine Railroad from the city of Cordova through the northern provinces of the Argentine Republic, and of connecting the Republic of Bolivia with the valley and water of the La Plata. *Tract.* 8vo. vol. 161.
Lond. 1867. 8vo.

MONGE, G. Application de l'analyse à la géométrie. 4^e édition. Paris, 1809. 4to.

MONIER, —. De l'état actuel de la navigation de la Seine, entre Rouen et Paris, et des moyens de la perfectionner. *Tract.* 4to. vol. 8. Paris, 1832. 4to.

MONIER, E. Reproduction de quelques substances minérales par la diffusion de liquides superposés de densité différente, *etc.* *Tract.* 8vo. vol. 331. St. Denis, [1880?] 8vo.

- MONKLAND NAVIGATION. Act for making and maintaining a navigable Cut or Canal, and Waggon-Way, from the collieries in the parishes of Old and New Monkland, to the city of Glasgow, . . . 1770. *Tract. 4to. vol. 7.* [1815?] 4to.
- Act for forming a Junction between the Forth and Clyde Navigation and the Monkland Navigation, . . . 1790. *Tract. 4to. vol. 7.* [1815?] 4to.
- Act for amending [the act of 1770]. 1813. folio.
- — [Another edition.] *Tract. 4to. vol. 7.* Lond. [1815?] 4to.
- MONNET, A. G. Atlas et description minéralogiques de la France. *Paris, 1780. folio.*
- Traité de l'exploitation des mines, . . . avec un traité particulier sur la préparation et le lavage des mines. Le tout traduit de l'allemand par M. Monnet. *Paris, 1773. 4to.*
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- MONS. Mémoire sur la jonction du canal de Mons avec l'Escaut par la Dendre, etc. *Tract. 8vo. vol. 11.* Mons, 1819. 8vo.
- La navigation de la Belgique vers Paris. Études faites pour effectuer en Belgique la jonction des bassins de la Meuse et de l'Escaut, par un canal de Mons à la Sambre. Rapport, etc. *Bruzelles, 1840. folio.*
- MONSON, E. The Advantages of the separate system of Drainage. *Tract. 8vo. vol. 247.* Lond. 1875. 8vo.
- Metropolitan Sewage and what to do with it. Part 1. *Tract. 8vo. vol. 351.* Lond. 1882. 8vo.
- Metropolitan Sewage and what to do with it . . . A scheme for the sewage disposal for the Metropolis, etc. 2 pts. *Lond. 1883. 8vo.* (Pt. 1 is another edition of the preceding.)
- MONTANA. Montana, its climate, soil, scenery, resources and industries, etc. *Tract. 8vo. vol. 462.* New York, 1883. 8vo.
- MONTANA, J. GIL Y. See GIL Y MONTANA, J.
- MONTANA COMPANY. Directors' Report, Balance Sheet and statement of accounts for half year ending 31st December, 1886. *Tract. 4to. vol. 118.* Lond. 1887. 4to.
- MONTCHOISY, — DE. Note sur des essais de calorimétrie et du mesurage d'eau vaporisée faits à bord du Nielly et du d'Estaing, etc. *Brest, 1882. 4to.*

- MONTEFIORE, J.** A Commercial Dictionary : containing the present state of mercantile law, practice, and custom. *Lond.* 1803. 4to.
- MONTEIL, L.** Percement de l'isthme de Suez. Description des travaux et ouvrages d'art définitifs des machines et des appareils, etc. (Atlas of plates.) *Paris*, 1874. 4to. and folio.
- MONTESINO, C. S.** Rompimiento del istmo de Suez. Memoria que acerca de la union del mar Rojo al Mediterráneo, por medio de un canal marítimo. *Madrid*, 1857. 8vo.
- MONTFERRIER, A. S. DE.** Dictionnaire des sciences mathématiques, pures et appliquées. 3 vols. *Paris*, 1835-40. folio.
- MONTGOMERY, J.** The Cotton Manufacture of the United States of America contrasted and compared with that of Great Britain. *Glasgow*, 1840. 8vo.
- The Theory and Practice of Cotton-Spinning ; or, the carding and spinning master's assistant. 3rd edition. *Glasgow*, 1836. 8vo.
- MONTGOMERY, J. J.** Belfast Drainage. Specifications. *Belfast*, 1869-83. 8vo.
- [Reports on the Drainage of the Borough of Belfast, etc.] *Belfast*, 1866, 67 and 75. 8vo.
- MONTGOMERYSHIRE CANAL.** Act for making a navigable Canal from or near Porthwyain Lime Rocks in the parish of Llanyblodwell in the county of Salop, to or near Newtown in the county of Montgomery, etc. *Lond.* 1794. folio.
- Act to authorize the raising of a further sum of money to complete the Montgomeryshire Canal, etc. *Lond.* 1815. folio.
- Case of the Montgomeryshire Canal Company, and of the land-owners and inhabitants of that and the adjoining counties in respect of the proposed tax on inland navigation. *Tract.* 8vo. vol. 98. *Shrewsbury*, 1797. 8vo.
- MONTGRAND, — DE, Marquis.** Mémoire sur la production mécanique du froid & du chaud. *Tract.* 8vo. vol. 437. *Marseille*, 1886. 8vo.
- MONTICELLI, F., Baron.** Dimostrazione teoretica e pratica della necessità . . . di ristaurare tra Monopoli e Brindisi l'attuale strada consolare avanzo rispettabile dell' antica Via Appia. *Napoli*, 1834. 4to.
- Terza memoria in difesa della città e de' porti di Brindisi. *Napoli*, 1833. 4to.
- MONTILLOT, L.** La lumière électrique. Générateurs, foyers, distribution, applications. *Paris*, 1890. 8vo.
- La télégraphie actuelle en France et à l'étranger ; lignes, réseaux, appareils, téléphones. *Paris*, 1889. 8vo.
- MONTLUISANT, G. DE D. DE.** Trois pages de la vie d'un ingénieur — C. L. J. de Montluisant, etc. *Valence-sur-Rhône*, 1892. 4to.

- MONTREAL. Report of a Commission of Engineers appointed . . . to inquire into the causes of the Floods at Montreal and to suggest remedies for their removal. *Tract. 8vo. vol. 494.*
Montreal, 1890. 8vo.
- Report of Montreal Flood Commission. *Tables, etc.*
Montreal, 1888. 8vo.
- [*Harbour.*] Annual Reports of the Commissioners, 1875, *etc.*
Montreal, 1876, etc. 8vo.
- Report of the Chief Engineer [H. F. Perley], of the Department of Public Works, Canada, on the St. Lawrence Bridge and Manufacturing Company's Scheme for proposed Works, 1883. *Tract. 8vo. vol. 348.*
Ottawa, 1883. 8vo.
- Report of the Harbour Engineer, *etc.* *Montreal, 1863. 8vo.*
- Report on a general scheme of Improvements for the Harbour of Montreal, *etc.* *1877. 8vo.*
- Reports in relation to the affairs of the Harbour Commissioners of Montreal, and the deepening of the Ship Channel in Lake St. Peter and the River St. Lawrence. *Montreal, 1855. 8vo.*
- Reports on the improvement and enlargement of the Harbour of Montreal [by W. J. McAlpine and others].
Montreal, 1873. 8vo.
- [*Surveyor.*] Report of the City Surveyor, 1877, (1884, 85, 87, *etc.*) *Tract. 8vo. vol. 288.* *Montreal, 1878, etc. 8vo.*
- [*Water Supply.*] Annual report of the Superintendent of the Waterworks. *Tract. 8vo. vol. 274.* *Montreal, 1877, 78. 8vo.*
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Lond. 1871. 8vo.
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Washington, 1891. 8vo.
- MOON, R. Professor Challis and Professor Tardy. The new equation in Hydrodynamics. *Tract. 8vo. vol. 193.*
Cambridge, 1850. 8vo.
- MOON, R. A. Formulæ for Flange Stresses in Single-braced Warren Girder uniformly loaded. *Tract. 8vo. vol. 486.*
Ardmore, 1889. 8vo.
- MOORE, A. A Handy Book of Railway Law . . . 2nd edition.
Lond. 1860. 8vo.
- MOORE, B. T. An Elementary Treatise on Mensuration.
Cambridge, 1863. 8vo.
- Report . . . on the sewage of Heston and Isleworth. *Tract. 8vo. vol. 275.* *1876. 8vo.*

- MOORE, C. On the Woods of New South Wales. *Tract. 8vo. vol. 264. Sydney, 1871. 8vo.*
- MOORE, C. W. A practical Guide for Prospectors, Explorers and Miners, etc. *Lond. 1893. 8vo.*
- MOORE, JOHN. A Report on the Sanitary Condition of Leicester in 1853. *Tract. 8vo. vol. 511. Leicester, 1853. 8vo.*
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- MOORE, R. T. Joseph Moore's Patent Hydraulic Pumping Arrangement. *Tract. 8vo. vol. 505. Hamilton, 1891. 8vo.*
- MOORE, RALPH. Official Correspondence respecting the Hooghly and Mutlah Ship Canal. *Tract. folio. vol. 1. Lucknow, 1863. folio.*
- MOORE, ROBERT. Annual Address [as President of the Engineers' Club of St. Louis]. *Tract. 8vo. vol. 535. [Philadelphia,] 1893. 8vo.*
- Present Aspect of the problem of American Inter-Oceanic Ship Transfer. (Read March 2, 1887.) *Tract. 8vo. vol. 458. [Chicago,] 1888. 8vo.*
- MOORE, T. The Treasury of Botany, etc. 1889. See LINDLEY, J., and MOORE, T.
- MOORE, W. U., *Commander*. The Bore of the Tsien-Tang Kiang (Hang-Chau Bay). *Tract. 8vo. vol. 486. Shanghai, 1889. 8vo.*
- MOORSOM, C. R., *Admiral*. Considerations on Steam Vessels. Some considerations on the performance of steam vessels, with a view to the careful record of such performances at sea, etc. *Tract. 8vo. vol. 111. Birmingham, 1856. 8vo.*
- Memorandum . . . on the performance of Steam Vessels, the functions of the screw, and the relations of its diameter and pitch to the form of the vessel. With appendices. *Tract. 8vo. vol. 139. Lond. 1860. 8vo.*
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- MOORSOM, W. S., *Capt.* Drawings, specification, quantities, &c., of the Bromsgrove Engine Factory. With a general description, and additional remarks, by G. B. W. Jackson. *Tract. 8vo. vol. 383. Lond. 1841. 8vo.*
- Report on the Ceylon Government Railway Survey. *Tract. folio. vol. 10. Lond. 1857. folio.*
- MORANDIÈRE, J. Les locomotives à l'exposition de Vienne en 1873. 1874-76. See DEGHILAGE, A. L., and MORANDIÈRE, J.

- MORANDIÈRE, J.—*continued*. Signaux optiques et acoustiques. Modèles, plans et dessins de gares, de stations, de remises et de dépendances de l'exploitation des chemins de fer. Exposition Universelle de 1867 à Paris. (Rapports du jury international.) *Tract. 8vo. vol. 166. Paris, 1867. 8vo.*
- MORANDIÈRE, R. Rapport sur la construction des chemins de fer de Poitiers à la Rochelle, de Tours au Mans, et de Nantes à Saint Nazaire. *Tract. folio. vol. 17. Paris, 1858-61. folio.*
- Traité de la construction des ponts. (Atlas of plates.) *Paris, 1874. 4to. and folio.*
- — [Another edition.] 2 vols. (Atlas of plates.) *Paris, 1880-88. 4to. and folio.*
- MORANT, A. W. Description of the Leeds Sewage Works and of the various processes which have been tried for the Purification of the Sewage. *Tract. 8vo. vol. 341. Lond. 1876. 8vo.*
- MORDECAI, A. Military Commission to Europe in 1855-56. Report. *Washington, 1861. 4to.*
- MORDECAI, G. Notes on the classification of Railroad Accounts and the analysis of railroad rates. *Tract. 8vo. vol. 463. [New York, 1888.] 8vo.*
- A Report on the Terminal Facilities for handling freight of the Railroads entering the Port of New York. *New York, 1885. 8vo.*
- MORE, H. An Hydrostatical Discourse occasioned by the objections of Dr. H. More, against some explications of new experiments made by Mr. Boyle; and now published by way of preface to the three ensuing tracts. *Tract. 8vo. vol. 35. [Lond. 1762?] 8vo.*
- MOREAU, G. Étude industrielle des gites métallifères. *Paris, 1894. 8vo.*
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- MORELL, B. Ueber Verwerthung der Wasserkräfte in der Schweiz und Volks-Eisenbahnen. *Tract. folio. vol. 17. Bern, [1875?] folio.*
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- MORFA COLLIERY. Reports on an Explosion which occurred at Morfa Colliery, Port Talbot, on the 10th of March, 1890; by H. Jeffreys and J. T. Robson. *Lond. 1890. folio.*

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Lond. 1840. 8vo.
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Lond. 1834. 8vo.
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- Études sur la ventilation. *Tract.* 8vo. vol. 182.
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- Mécanique pratique. Études sur la ventilation. 2 vols. Paris, 1863. 8vo.

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— Notions fondamentales de mécanique et données d'expérience. 3^{me} édition. Paris, 1860. 8vo.

— Fundamental ideas of mechanics and experimental data. . . . Translated and reduced to English units of measure by J. Bennett. New York and Lond. 1860. 8vo.

— Notions géométriques sur les mouvements et leurs transformations ou éléments de cinématique. 3^{me} édition. Paris, 1861. 8vo.

— Nouvelles expériences sur l'adhérence des pierres et des briques posées en bain de mortier ou scellées en plâtre, le frottement des axes de rotation, la variation de tension des courroies ou cordes sans fin employées à la transmission du mouvement, etc. *Tract. 4to. vol. 51.* Paris, 1838. 4to.

✓ — Nouvelles expériences sur le frottement, faites à Metz en 1831–32. Paris, 1832–34. 4to.

MORIN, A. J., *General*, and TRESKA, H. De l'organisation de l'enseignement industriel, etc. *Tract. 8vo. vol. 397.*

Paris, 1862. 8vo.

— Mécanique pratique. Des machines à vapeur. Vol. 1.

Paris, 1863. 8vo.

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✓ — The Cairo Bridge [Illinois]. Report, etc. [Chicago,] 1892. folio.

✓ — Kansas City and Memphis Railway and Bridge Company. Specifications for superstructure of Bridge across the Mississippi River, at Memphis, Tennessee. *Tract. folio. vol. 45.* 1890. folio.

✓ — The Kansas City Bridge, etc. 1870. See CHANUTE, O., and MORISON, G.

✓ — The Nebraska City Bridge: a report [with detailed drawings and plans] to . . . the president of the Chicago, Burlington and Quincy Railroad Company. Chicago, 1893. obl. folio.

✓ — The New Omaha Bridge: a Report, etc. New York, 1889. folio.

✓ — Northern Pacific Railroad. Specifications for superstructure of Bridge across the Willamette River at Portland, Oregon. *Tract. folio. vol. 44.* New York, 1883. folio.

✓ — The Plattsmouth Bridge: a report to C. E. Perkins, President of the Chicago, Burlington and Quincy Railroad. New York, 1882. folio.

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- Observations in relation to a communication between the Atlantic and Pacific Oceans, through the Isthmus of Tehuantepec. *Tract*. 8vo. vol. 485. New York, 1849. 8vo.
- Report of the survey of the isthmus of Tehuantepec, executed in the years 1842 and 1843, with the intent of establishing a communication between the Atlantic and Pacific Oceans, etc. *Tract*. 8vo. vol. 89. Lond. 1844. 8vo.
- MORPETH. Report from Select Committee on the . . . Morpeth and Edinburgh Road. Lond. 1822. folio.
- MORRE, G. J. See HUET, A. De stoombemaling des ZuiderzEEPolders, . . . Tweede gedeelte. Bouwkundig ontwerp door G. J. Morre. 1890.

- MORRIS CANAL AND BANKING COMPANY. Annual Report to the Stockholders. *Tract. 8vo. vol. 157.* New York, 1861. 8vo.
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- MORRIS, F. S. The "Lock Grip" Patent Railway Chair. *Tract. . vol.*
- MORRIS, H. Communication between Passengers and Guard on Railways. *Tract. 8vo. vol. 340.* Manchester, 1881. 8vo.
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- MORRISON, J. The Influence of English Railway Legislation on trade and industry; with an Appendix of tracts and documents. *Lond. 1848. 8vo.*
- Observations illustrative of the defects of the English System of Railway Legislation, *etc.* *Tract. 8vo. vol. 470.* *Lond. 1846. 8vo.*

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- MOSCHELL, J. *Étude comparative sur la voie étroite et la voie large. Tract. 8vo. vol. 256. Zurich, 1874. 8vo.*
- Notice sur le chemin de fer à voie étroite de Lausanne à Echallens. *Tract. 8vo. vol. 317. Paris, 1880. 8vo.*
- MOSELEY, H., *Canon. Astro-theology. Lond. 1847. 8vo.*
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- On the Equilibrium of the Arch. *Tract. 4to. vol. 40. Cambridge, 1835. 4to.*
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- MOSS, J. The Cotton Manufacturer's, Manager's, and Spinner's new pocket guide. 4th edition. *Manchester*, 1878. 8vo.
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- MOSS VALE, N.S.W. Report . . . relating to the proposed Railway from Moss Vale to Robertson. *Sydney*, 1890. folio.
- MOSSEL BAY, *Cape Colony*. Correspondence on the subject of the proposed Harbour Improvements. 1876. folio.
- Report of the Commissioners for Improving the Port and Harbour of Mossel Bay, 1877-79. 1878-80. folio.
- MOSSFIELDS COLLIERY. Report by H. Thomas on the Explosion at Mossfields Colliery. (Appendix.) *Lond.* 1890. folio.
- Report on the Explosion at Mossfields Colliery by W. N. Atkinson. *Lond.* 1890. folio.
- MOSSOTTI, O. F. Sul moto dell' acqua nei canali. *Tract.* 4to. vol. 1. *Modena*, 1824. 4to.
- MOTHES, O. Geschichte der Baukunst und Bildhauerei Venedigs. 2 vols. *Leipzig*, 1859-60. 8vo.
- Illustriertes Bau-Lexikon. 3 vols. *Leipzig*, 1863-68. 8vo.
- Technologisches Wörterbuch. 1868-69. See RUMPF, C., and MOTHES, O.
- MOTT, H. A. The Adulteration of Milk. *Tract.* 8vo. vol. 288. *New York*, 1878. 8vo.
- Complete History and Process of Manufacture of artificial Butter. *Tract.* 8vo. vol. 288. *New York*, 1876. 8vo.
- MOTTE, A. A Treatise of the Mechanical Powers: wherein the laws of motion and the properties of those powers are explained. *Lond.* 1733. 8vo.
- MOUCHELET, A. Mécanique des travaux publics, etc. [1840.] See MOUGEL, E., and MOUCHELET, A.
- MOUGEL, E. Notice sur le barrage du Nil. [MS.] *Tract.* 8vo. vol. 154. 1850. 8vo.
- MOUGEL, E., and MOUCHELET, A. Mécanique des travaux publics ; ou application de la vapeur et des machines les plus modernes à la construction des édifices, chemins de fer, ports, canaux, etc. Livraisons 1-10. *Paris*, [1840.] obl. folio.
- MOULE, H. Manual of the Dry-Earth System. *Tract.* 8vo. vol. 275. *Hereford*, 1876. 8vo.
- National Health and Wealth, instead of the disease, nuisance, expense, and waste, caused by cess-pools and water-drainage. *Tract.* 8vo. vol. 223. *Lond.* 1859. 8vo.
- National Wealth and Health promoted by the general adoption of the Dry Earth System. Part 1. *Tract.* 8vo. vol. 259. *Dorchester*, 1875. 8vo.

- MOULE, H.—*continued*. Sewage Difficulties in a small borough town for twenty-three years under the Health of Towns Act. *Tract*. 8vo. vol. 325. *Dorchester*, 1879. 8vo.
- Town Refuse, the remedy for Local Taxation. 2nd edition. *Tract*. 8vo. vol. 275. *Lond.* 1872. 8vo.
- MOULE, T. An Essay on the Roman Villas of the Augustan Age. *Lond.* 1833. 8vo.
- MOULTON, *Lincs.* Act for dividing and enclosing the commonable Saltmarshes . . . and Waste Lands within the parish of Moulton. *Lond.* 1793. folio.
- MOUNT BARKER, *S. Australia*. Mount Barker and Strathalbyn Line, *etc.* *Adelaide*, 1882. folio.
- Plans and Sections of the Mount Barker and Strathalbyn Line. *Adelaide*, 1881. folio.
- MOUNT MORGAN, *Queensland*. Some account of the Mount Morgan Gold Mine, Rockhampton, Queensland. Compiled by W. G. C. *Tract*. 8vo. vol. 457. *Rockhampton*, 1885. 8vo.
- MOUNTAIN, A. C. Notes on Portland Cement. *Tract*. 8vo. vol. 433. *Sydney*, 1885. 8vo.
- Road Pavements in Sydney. *Tract*. 8vo. vol. 402. *Sydney*, 1884. 8vo.
- MOUNTAINE, W. The practical Sea-gunner's Companion: or, an introduction to the art of gunnery, *etc.* *Tract*. 8vo. vol. 367. *Lond.* 1763. 8vo.
- MOUNTENEY, B. Selections from the various authors who have written concerning Brazil; more particularly respecting the Captaincy of Minas Geraës, and the gold mines of that province. *Lond.* 1825. 8vo.
- MOUNT'S BAY. Prospectus of the new intended Mount's Bay Harbour. *Tract*. 4to. vol. 31. *Helston*, 1810. 4to.
- MOURET, G. Les équilibres chimiques. 1891. *See* LE CHATELIER, H., and MOURET, G.
- MOURLON, C. Rapport sur les travaux de la Société belge des électriciens, pendant l'exercice 1886–87. *Tract*. 8vo. vol. 448. *Bruxelles*, 1887. 8vo.
- Les téléphones usuels. 2^e édition. *Bruxelles*, [1887 ?] 8vo.
- MOUSSETTE, —. Commission d'enquête sur les chemins de fer. Rapport de . . . M. Moussette . . . (Mission en Angleterre). 1862. *See* LAN, C., MOUSSETTE, —, BERGERON, C., and DUBOCQ, C.
- Two Reports to the Minister of Agriculture, Commerce, and Public Works, on the Commercial Tariffs of Railways in Great Britain. *Tract*. folio. vol. 5. *Paris*, 1860. folio.
(Lithographed.)
- MOUZÉ, —. Traité de fortification souterraine, suivi de quatre mémoires sur les mines. *Paris*, 1804. 4to.

- MOWATT, J. R. The Great Northern Railway Company : a letter to the shareholders. *Tract.* 8vo. vol. 183. Lond. 1858. 8vo.
- MOWBRAY, G. M. Tri-nitro-glycerin, as applied in the Hoosac Tunnel, Submarine blasting, etc. *North Adams, Mass.*, 1872. 8vo.
- MOWRY, S. The Geography and Resources of Arizona and Sonora : an address . . . a New edition, with an appendix. New York, 1863. 8vo.
- MOXHAM, E. Specimens of Inlaid Tiles, etc. See KNIGHT, H. H., and MOXHAM, E.
- MOXON, J. Mechanick Exercises : or, the Doctrine of Handy-works, applied to the arts of smithing, joinery, carpentry, turning, and bricklayery ; to which is added mechanick dyalling, etc. 3rd edition. Lond. 1703. 8vo.
- Mechanick Powers, etc. 1696. See MANDEY, V., and Moxon, J.
- MOXON, J. H. H. Fen Floods and the Lower Ouse. *Tract.* 8vo. vol. 314. Cambridge, 1878. 8vo.
- MOYLE, S. Report for a Breakwater in Plymouth Sound, submitted to the Board of Admiralty, September 7, 1812, etc. *Tract.* 4to. vol. 1. Lond. 1813. 4to.
- MUCK, F. Die Chemie der Steinkohle. Leipzig, 1891. 8vo.
- MUDGE, R. Z. Observations on Railways, with reference to utility, profit, and the obvious necessity for a national system. *Tract.* 8vo. vol. 79. Lond. 1837. 8vo.
- MUDGE, W., Lieut.-Col. R.A., and COLBY, T. An account of the Trigonometrical Survey . . . between the years 1801–9. Lond. 1811. 4to.
- MUDGE, W., Lieut.-Col. R.A., and DALBY, J. An Account of the operations carried on for accomplishing a Trigonometrical Survey of England and Wales ; from the commencement, in the year 1784, to the end of the year 1799, etc. 2 vols. Lond. 1779–1801. 4to.
- MUDGE, W., Commander R.N., and FRAZER, G. A. Sailing Directions for the north-east, north, and north-west coasts of Ireland. Lond. 1842. 8vo.
- MUDGE, N.S.W. Report . . . relating to the proposed Railway from Mudgee to Gulgong. Sydney, 1890. folio.
- MUELLER, F. von, Baron. Eucalyptographia : a descriptive atlas of the Eucalypts of Australia and the adjoining islands. Decades I.–X. Melbourne, 1879–84. 4to.
- A lecture on the Flora of Australia, etc. *Tract.* 8vo. vol. 473. Ballarat, 1882. 8vo.
- Observations on Vegetable Fossils of the Auriferous Drifts. *Tract.* 4to. vol. 94. Melbourne, 1883. 4to.
- See MACIVOR, R. W. E. Agricultural Chemistry . . . with appendix : the Creation, Maintenance and Enrichment of Forests by Baron F. von Mueller. 1879.

- MUESELER, —, and CLANNY, R. On the Safety Lamps of M. Mueseler and Dr. Reid Clanny, etc. *Tract.* 8vo. vol. 78. *Gateshead*, 1843. 8vo.
- MUIR, G. W. Papers on the Pollution of the Clyde at Glasgow, with plans and estimates. *Tract.* 8vo. vol. 418. *Glasgow*, 1884. 8vo.
- MUIR, W. J. C. Light railways. *Tract.* 8vo. vol. 179. *Edinburgh*, 1869. 8vo.
- Observations on the Construction of the Track of Railways. *Tract.* 8vo. vol. 155. *Edinburgh*, 1867. 8vo.
- MUIRHEAD, H. D. Scheme of Channel Communication securing perfect immunity from sea sickness. *Tract.* 8vo. vol. 241. *Lond.* 1874. 8vo.
- MUIRHEAD, J. P. The Life of James Watt, with selections from his correspondence. 2nd edition, revised. *Lond.* 1859. 8vo.
- The Origin and Progress of the Mechanical Inventions of James Watt, illustrated by his correspondence with his friends, etc. 3 vols. *Lond.* 1854. 4to.
- MULDOON, P. See FOURNEL, H. Description of the Asphaltic Mine of the Val-de-Travers . . . To which are appended, remarks on the works executed by the Seyssel and other companies . . . throughout France, by P. Muldoon. 1838.
- MULHALL, M. G. Dictionary of Statistics. *Lond.* 1884. 8vo.
- MULHALL, M. G., and E. T. Handbook of the River Plate Republics, comprising Buenos Ayres and the Argentine, Uruguay and Paraguay Republics. *Lond. and Buenos Ayres*, 1875. 8vo.
- MÜLHAUSEN.—*Gesellschaft zur Verhütung von Fabrikunfällen.* Sammlung von Vorrichtungen und Apparaten zur Verhütung von Unfällen an Maschinen. *Mülhausen*, 1889. folio.
- *Société Industrielle.* Bulletin. Vols. 1–2, etc. *Mulhouse*, 1836, etc. 8vo.
- Enquête décennale sur les institutions d'utilité publique de la Haute-Alsace. *Mulhouse*, 1889. 8vo.
- Programme des prix proposés . . . Mai 1891, etc. *Mulhouse*, 1891. 8vo.
- Projets de stations centrales d'énergie mécanique, etc. [Supplément au Bulletin de mars, 1893.] *Strasbourg*, 1893. 8vo.
- MÜLHEIM.—*Friedrich Wilhelms-Hütte.* See FRIEDRICH WILHELMS-HÜTTE, *Mülheim*.
- MULLER, —. Exposition universelle de 1878. Notice sur les appareils présentés par MM. Muller et Fichet. *Tract.* 8vo. vol. 422. *Paris*, 1878. 8vo.
- MULLER, ADAM. Manuel de l'irrigateur. 1860. See VILLEROY, F., and MULLER, A.
- MULLER, ADRIEN. Métallurgie du zinc: nouvelle méthode de traitement direct des minerais de zinc dans des foyers métallurgiques. *Tract.* 8vo. vol. 175. *Paris*, 1862. 8vo.

- MULLER, ADRIEN, and LENCAUCHEZ, A. *Métallurgie du zinc, Nouvelle méthode de traitement au haut fourneau à cuve. Tract. 4to. vol. 61. Liege, 1861. 4to.*
- MÜLLER, C. *Constructionslehre der Maschinentheile nebst Resultaten für den Maschinenbau. (Atlas of plates.) Stuttgart, 1866. 8vo. and 4to.*
- MÜLLER, E. *Der Telegraphenbetrieb in Kabelleitungen unter besonderer Berücksichtigung der in der Reichs-Telegraphenverwaltung bestehenden Verhältnisse. Berlin, 1890. 8vo.*
- MULLER, ÉMILE, and CACHEUX, É. *Les habitations ouvrières en tous pays. (Atlas of plates.) Paris, 1879. 8vo. and folio.*
- MÜLLER, ERNST. *Die Maschinen der Textilindustrie auf der Jubiläumsausstellung zu Manchester (1887). Tract. 4to. vol. 109. Berlin, 1888. 4to.*
- *Nähmaschinen. Tract. 4to. vol. 114. Berlin, [1889.] 4to.*
- *Ueber die Schutzvorrichtungen an den Maschinen der Textilindustrie auf der Ausstellung für Unfallverhütung in Berlin, 1889. Tract. 4to. vol. 114. Berlin, [1889.] 4to.*
- *Ueber Schutzvorrichtungen gegen das Herausfliegen der Webschützen unter besonderer Berücksichtigung der auf der "Deutschen allgemeinen Ausstellung für Unfallverhütung zu Berlin (1889)," ausgestellten. Tract. 4to. vol. 114. Berlin, [1889.] 4to.*
- MÜLLER, F. C. G. *Einige Beobachtungen über die Bildung von Ammoniak bei der trocknen Destillation der Steinkohlen. Tract. 4to. vol. 108. Düsseldorf, 1888. 4to.*
- *Grundzüge einer Theorie des Stahls. Tract. 4to. vol. 108. Düsseldorf, 1888. 4to.*
- *Die kritischen Punkte der Eisenlegirungen nach den Untersuchungen Osmonds. Tract. 4to. vol. 118. Düsseldorf, 1891. 4to.*
- *Neue Apparate und Versuche für den physikalischen Unterricht. Tract. 4to. vol. 106. Brandenburg, 1887. 4to.*
- *Ueber den Wasserstoff- und Stickstoffgehalt im Eisen und Stahl. Tract. 8vo. vol. 332. Berlin, 1881. 8vo.*
- *Ueber ein neues Barometer und Luftthermometer. Tract. 8vo. vol. 480. Leipzig, 1889. 8vo.*
- *Ueber Feuerungen mit theilweiser Regenerirung der Verbrennungsproducte. Tract. 4to. vol. 118. Düsseldorf, 1891. 4to.*
- *Untersuchungen über den Tiegelstahlprocess. Tract. 4to. vol. 104. Düsseldorf, 1886. 4to.*
- MÜLLER, J. *Principles of Physics and Meteorology. Lond. 1847. 8vo.*
- MÜLLER-BRESLAU, H. F. B. *Die neueren Methoden der Festigkeitslehre und der Statik der Baukonstruktionen. Leipzig, 1886. 8vo. 2 c*

- MÜLLER-BRESLAU, H. F. B., and SEYRIG, T. *Éléments de statique graphique appliquée aux constructions.* (Atlas of plates.) *Paris*, 1886. 8vo.
- MULLIN, J. P. *Modern Moulding and Pattern Making.* *New York*, 1885. 8vo.
- MULLINS, J., *Lieut-Gen.* *Irrigation Manual.* *Lond.* 1890. folio.
- MULOCK, T. *Railway Revelations; being letters on the subject of the proposed Direct London and Manchester Railways.* *Tract.* 8vo. vol. 302. *Lond.* 1845. 8vo.
- MULTIPLE SPEED AND TRACTION COMPANY. *The Multiple Speed and Traction Railway: or movable sidewalk.* *Tract.* 4to. vol. 115. [*Chicago?*] 1892. 4to.
- MULVANEY, W. T. *See SHANNON, Riser.* Report on an examination of the country between the rivers Shannon and Erne, by W. T. Mulvaney. 1839.
- MULVANY, C. [Four Reports on the drainage of various districts, County of Meath. *Dublin*, 1847. 8vo.
- MULVANY, T. J. [Fifteen Reports on the drainage of various districts in Ireland. *Dublin*, 1846-51. 8vo.
- MULVANY, T. J., and GISBORNE, L. *Longford District, County Longford. Supplemental Report . . . showing the present state of the works remaining to be executed, and the total cost of completing the District.* *Dublin*, 1850. 8vo.
- MULVANY, W. T. *Anlage eines Central-Bahnhofs und die Gestaltung des Eisenbahnnetzes in und um Düsseldorf nach Verstaatlichung der Eisenbahnen.* *Tract.* 8vo. vol. 463. *Düsseldorf*, 1880. 8vo.
- MULVANY, W. T., and T. R. *Amalgamation von Kohlen-Bergwerken in einem östlichen Theile des Oberbergamts-Bezirks Dortmund.* *Tract.* folio. vol. 32. *Düsseldorf*, 1882. folio.
- Projected International Communication in the North and East of Europe through the new Harbour of Flushing, etc. (Projectirte internationaler Verkehr, etc.) [*Eng. and Germ.*] 2 pts. *Düsseldorf*, 1873. 4to.
- MUMBLES HEAD LIGHTHOUSE. A Bill for more effectually maintaining the Lighthouse at the Mumbles Head in the county of Glamorgan, and for making and maintaining a Pier or Break-water near the said lighthouse. *Lond.* 1833. folio.
- MUNDAY, G. J. Description of the Coffor-Dams used in laying the lines of Water-Pipes between Twickenham and Richmond, crossing the River Thames. *Tract.* 8vo. vol. 501. (From Min. Proc. Inst. C.E.) *Lond.* 1855. 8vo.
- MUNICH. *Conferenz zur Vereinbarung einheitlicher Untersuchungs-Methoden bei der Prüfung von Bau- und Constructions-Materialien auf ihre mechanischen Eigenschaften, . . . abgehalten am 22-24 September, 1884.* *Tract.* 4to. vol. 117. *München*, 1884. 4to.
- *Commission für Wasserversorgung, etc.* *Berichte (1-3) über Verhandlungen und Arbeiten.* *München*, 1876-79. 4to.

- MUNICH**—*continued*. *Königlich-Technische Hochschule*. Mittheilungen aus dem Mechanisch-Technischen Laboratorium der K. Technischen-Hochschule . . . von J. Bauschinger. *München*, 188 . 4to.
 — *Polytechnische Schule*. Programm für 1868–69. *München*, 1868. 8vo.
- MUNICIPAL AND COUNTY ENGINEERS**. See INCORPORATED ASSOCIATION OF MUNICIPAL AND COUNTY ENGINEERS.
- MUNIER-CHALMAS**, —. See ROUDAIRE, —. Extraits de la mission de M. le commandant Roudaire dans les chotts tunisiens (1878–79) . . . II. Paléontologie . . . par Munier-Chalmas. 1881.
- MUNK**, I. Einzelnernährung und Massenernährung. [*Handbuch der Hygiene* : herausgegeben von Dr. F. Weyl. Bd. 3.] *Jena*, 1893. 8vo.
- MUNN AND CO.** The United States Patent Law, etc. *New York*, 1870. 12mo.
- MUNRO**, J. Electricity and its Uses. *Lond.* [1883.] 8vo.
 — — 3rd edition . . . enlarged. *Lond.* 1890. 8vo.
 — Heroes of the Telegraph. *Lond.* 1891. 8vo.
 — Pioneers of Electricity : or, short lives of the great Electricians. *Lond.* 1890. 8vo.
- MUNRO**, J., and JAMIESON, A. A Pocket-book of Electrical Rules and Tables for the use of Electricians and Engineers. *Lond.* 1884. 8vo.
 — — 4th edition. *Lond.* 1886. 12mo.
 — — 6th edition . . . enlarged. *Lond.* 1889. 12mo.
- MUNROE**, H. S. The English *versus* the Continental system of Jigging : is close sizing advantageous? *Tract.* 8vo. vol. 488. [*New York*,] 1889. 8vo.
 — Geological Survey of Hokkaido. Geological notes. *Tract.* 8vo. vol. 379. *Tokio*, 1876. 8vo.
 — Geological Survey of Hokkaido. The Goldfields of Yesso. *Tract.* 8vo. vol. 391. *Tokio*, 1875. 8vo.
 — Geological Survey of Hokkaido. Yesso Coals. *Tract.* 8vo. vol. 391. *Tokio*, 1874. 8vo.
 — The Manufacture of Japanese Paper. *Tract.* 8vo. vol. 295. *New York*, 1876. 8vo.
 — Prehistoric Bronze Bells from Japan. *Tract.* 8vo. vol. 295. [*New York*,] 1877. 8vo.
 — The new Dressing-works of the St. Joseph Lead Company, at Bonne Terre, Missouri. *Tract.* 8vo. vol. 488. [*New York*,] 1889. 8vo.
- MURCHISON**, Sir R. I. Address delivered at the Southampton meeting of the British Association, etc. *Tract.* 8vo. vol. 86. *Lond.* 1846. 8vo.
 — Inaugural address at the first general meeting of the Dudley and Midland Geological Society held . . . January 17, 1842. *Tract.* 8vo. vol. 97. *Lond.* 1842. 8vo.

- MURCHISON, Sir R. I.—*continued*. The Silurian System, founded on Geological Researches in various Counties of England; with descriptions of the coal fields and overlying foundations. 2 vols. *Lond.* 1839. 4to.
- MURCHISON, Sir R. I., VERNEUIL, E. DE, and KEYSERLING, A. VON. The Geology of Russia in Europe and the Ural Mountains. 2 vols. *Lond. and Paris*, 1845. 4to.
- MURDOCK, W. A Letter . . . in vindication of his Character and Claims, *etc.* *Lond.* 1809. 8vo.
- MURGUE, D. Essai d'une exposition rationnelle de la théorie mécanique de la chaleur. *Saint-Etienne*, 1888. 8vo.
- The Theories and Practice of Centrifugal Ventilating Machines: translated by A. L. Steavenson. *Lond.* 1883. 8vo.
- MURHARD, F. G. A. Dissertatio inauguralis: specimen historiæ atque principiorum calculi quem vocant variationum sistens, *etc.* *Tract.* 8vo. vol. 33. *Gottingæ*, 1796. 8vo.
- MURPHY, E. [Nine Reports on the drainage of various districts in Ireland.] *Dublin*, 1846, 47. 8vo.
- MURPHY, R. Elementary Principles of the Theories of Electricity, Heat, and Molecular Actions . . . Part I. On Electricity. *Cambridge*, 1833. 8vo.
- MURPHY, S. F., and OTHERS. Our Homes and how to make them healthy. *Lond.* 1883. 8vo.
- MURRAY, River. Cost of Murray Bridge. [*Adelaide*,] 1878. folio.
- Report and estimates of proposed River Murray Canal. *Adelaide*, 1874. folio.
- Report on River Murray, by J. E. F. Coyle. *Sydney*, 1889. folio.
- Report on Murray Flats Water Supply. [*Adelaide*,] 1878. folio.
- Report on the Murray River district. *Melbourne*, 1856. folio.
- Reports on the Murray and Port Bridges. *Adelaide*, 1877. folio.
- MURRAY, A. G. Indian Famines, Railways, and Canals. *Tract.* 8vo. vol. 26. [1877?] 8vo.
- MURRAY, ALEXANDER. The modern universal British Traveller, *etc.* 1779. See BURLINGTON, C., REES, D. L., and MURRAY, A.
- MURRAY, ANDREW. On the Construction and proper Proportions of Boilers for the Generation of Steam. *Tract.* 8vo. vol. 62. *Lond.* 1844. 8vo.
- The Theory and Practice of Ship-building. With portions of the Treatise on naval architecture, by A. F. B. Creuze. Steamships, by R. Murray. *Edinburgh*, 1861. 4to.
- MURRAY, C. Description of his patent improved Chain Pumps, portable and fixed. *Tract.* 8vo. vol. 141. [*Lond.*] 1859. 8vo.

- MURRAY, G. Aërial Locomotion: a descriptive treatise of a practical method of traversing the atmosphere. *Tract.* 8vo. vol. 165. *Liverpool*, [1865?]. 8vo.
- MURRAY, JAMES A. H. A new English Dictionary on historical principles; founded mainly on the materials collected by the Philological Society. (In progress.) *Oxford*, 1884, etc. 4to.
- MURRAY, JOHN. Handbook to London. *Lond.* 1876. 12mo.
- MURRAY, JOHN, F.R.S.E. On the total annual Rainfall on the land of the Globe and the relation of Rainfall to the annual discharge of Rivers. *Tract.* 8vo. vol. 433. [Edinburgh,] 1887. 8vo.
- MURRAY, JOHN, M. Inst. C.E. An Account of the progressive improvement of Sunderland Harbour, and the River Wear. *Tract.* 8vo. vol. 502. *Lond.* 1849. 8vo.
(From Min. Proc. Inst. C.E.)
- Account of the removal of the Light-house at Sunderland. *Tract.* 8vo. vol. 502. (From Min. Proc. Inst. C.E.) *Lond.* 1844. 8vo.
- Description of a Project, with plans and sections, submitted to the Metropolitan Commissioners of Sewers for the Drainage and Sewerage of London. *Tract. folio.* vol. 5. *Lond.* 1852. folio.
- Objections to the plans [of I. K. Brunel and T. Page] for Swansea Docks. [MS.] 1846. folio.
- Proposed Improvement of the estuary of the River Tees. *Tract. folio.* vol. 5. *Lond.* 1851. folio.
- MURRAY, M. A treatise on Ship-building and Navigation. *Lond.* 1754. 4to.
- MURRAY, R. Catalogue of one hundred and sixty-three Photographic Views from Malta, Alexandria, Cairo, Thebes, Upper Egypt, and Nubia. *Tract.* 8vo. vol. 115. [Lond. 1859?] 8vo.
- Practical Essay on the Steam-engine. [1840.] folio.
(Pt. 1 of the "Engineer and Machinists' Assistant.")
- Rudimentary treatise on Marine Engines and Steam Vessels; together with practical remarks on the screw, etc. 3rd edition. *Lond.* 1858. 8vo.
- See MURRAY, ANDREW. Theory of Shipbuilding . . . Steamships by R. Murray. 1861.
- MURRAY, R. A. F. Victoria: geology and physical geography. *Melbourne*, 1887. 8vo.
- MURRAY, S. Water-supply to the Mallee, 1892. See VICTORIA.— [Water-Supply.]
- MUSEUM OF MANKIND. Museum of Mankind. [A scheme for founding an Institution for the study of Mankind.] *Tract.* 8vo. vol. 54. *Lond.* 1842. 8vo.
- MUSEUM OF PRACTICAL GEOLOGY. See GEOLOGICAL SURVEY.
- MUSHET, D. Experiments upon cast and malleable Iron, at the Milton Iron-Works, etc. *Tract.* 8vo. vol. 501. *Lond.* 1843. 8vo.
(From Min. Proc. Inst. C.E.)

- MUSHET, D.—*continued*. The Invention of grooved Rollers for the manufacture of Bar Iron. *Tract.* 8vo. vol. 101.
Lond. [1855.] 8vo.
- Papers on Iron and Steel, practical and experimental, *etc.*
Lond. 1848. 8vo.
- MUSHET, R. [Specification of] Improvements in the Manufacture of Iron and Steel. *Tract.* 4to. vol. 61. *Lond.* 1857. 8vo.
- MUSICAL ASSOCIATION, *London*. Proceedings. 1874–78.
Lond. 1875–78. 8vo.
- MUSIL, A. Die Motoren für das Kleingewerbe. 2nd edition. *Tract.* 8vo. vol. 354. *Braunschweig*, 1883. 8vo.
- MUSPRATT, J. S. Chemistry, theoretical, practical, and analytical, as applied and relating to the arts and manufactures. 2 vols.
Glasgow, 1860. 8vo.
- The use of the Blowpipe, *etc.* 1854. 8vo. See PLATTNER, C. F., and MUSPRATT, J. S.
- MUSTON. Muston Drainage Bill, relative to compensation for lands. *Tract.* 8vo. vol. 46. [*Lond.* 1800?] 4to.
- MUSY, C. Description of an improved Aërostatic Machine with horizontal direction—for exploration, for promoting geographical science, and for scientific purposes. *Tract.* 4to. vol. 52.
[1860?] 8vo.
- MUTINELLI, G. Il nuovo sistema Abt di ferrovie ad ingranaggio ed aderenza e le sue applicazioni. *Tract.* 8vo. vol. 482.
Roma, 1887. 8vo.
- MÜTZE, —. Traction of Boats on Canals, Canalised Rivers and Free Rivers of the Rhine Basin. Report. [5th Int. Congr. Int. Nav.] [*Paris*, 1892.] 8vo.
- MUYDEN, A. VAN. Étude sur la distribution d'eau de Lausanne. *Tract.* 8vo. vol. . *Lausanne*, 1883. 8vo.
- MYERS, W. B. The "Schwedler" Bridge: a comparison of the various forms of Girder Bridges. *Tract.* 8vo. vol. 264.
Lond. 1876. 8vo.
- MYLNE, R. A letter to J. Patteson, Esq., on the state of the Mills, Waterworks, *etc.*, of the city of Norwich, *etc.* *Tract.* 4to. vol. 35.
Norwich, 1789. 4to.
- Petition respecting Blackfriars Bridge. *Tract.* folio. vol. 27.
Lond. 1774. folio.
- Report on a survey of the River Thames from Boulter's lock to the city stone near Staines, and on the best method of improving the navigation of the said river, *etc.* *Tract.* 8vo. vol. 64.
1793. 8vo.
- Report on the proposed improvement of the Drainage and Navigation of the River Ouze, by executing a straight cut, from Eau-brink, to King's Lynn. *Tract.* 4to. vol. 34. *Lond.* 1792. 4to.

- MYLNE, R.**—*continued.* Report on three new Cuts, for the improvement of the Navigation of the River Thames, above Oxford. *Tract. 8vo. vol. 8.* *Lond.* 1802. 8vo.
- Report respecting Tyne Bridge: with plan for temporary bridge; also Messrs. Rawlings and Wake's abstract of the borings into the bed of the river Tyne. *Tract. 8vo. vol. 264.* *Newcastle,* 1772. 8vo.
- Reports upon the Navigation of the Rivers Thames and Isis. *Tract. 8vo. vol. 34.* *Lond.* 1791. 8vo.
See also JESSOP, W., and MYLNE, R.
- Report the Second, on the navigation of the River Thames, between Lechlade and Whitchurch. *Tract. 8vo. vol. 34.* 1791. 8vo.
- MYLNE, R. S., Rev.** The Master Masons to the Crown of Scotland and their Works. *Edinburgh,* 1893. 4to.
- MYLNE, R. W.** Geological and topographical map of London and its environs. *Lond.* 1858. 8vo.
- Map of the Contours of London and its Environs, showing the Districts and Areas supplied by the nine Metropolitan Water Companies. *Lond.* 1856. folio.
- Sections of the London Strata; to which is prefixed a block plan of the Metropolis and its Suburbs. *Lond.* 1850. 4to.
- Topographical map of London and its Environs. *Tract. 8vo. vol. 369.* *Lond.* 1851. 8vo.
- MYLNE, W. C.** Report addressed to the New River Company upon the Supply of Water to the City Sewers: together with the second report thereupon addressed to the Commissioners of City Sewers, by W. Haywood. *Lond.* 1854. 8vo.

N.

- NÄGELI, C. Entstehung und Begriff der natur-historischen Art. Zweite Auflage. *Tract.* 8vo. vol. 158. München, 1865. 8vo.
- NAIRNE, S. *Australia*. Nairne Railway. Reports and Estimates. 5 pts. [Adelaide,] 1878. folio.
- NAMUR, *Province of*. Situation de l'industrie minérale . . . pendant les années 1879-1887. Namur, [1880-1888.] 8vo.
- NAMUR AND LIÈGE RAILWAY. Report of the directors . . . at the first general meeting, etc. *Tract.* 8vo. vol. 77. Lond. 1846. 8vo.
- NAMUR, A. Tables de logarithmes à 12 décimales. *Tract.* 8vo. vol. 290. Bruxelles, 1877. 8vo.
- NANSOUTY, M. DE. L'année industrielle, 1887, etc. Paris, 1887, etc. 8vo.
- Le chemin de fer glissant de Girard et Barre. Paris, [1890?] 8vo.
- La navigation de nuit dans le canal de Suez. *Tract.* 8vo. vol. 436. Paris, 1886. 8vo.
- La tour Eiffel de 300 mètres à l'Exposition Universelle de 1889 : historique et description. 2^e édition. [Preceded by a biography of G. Eiffel.] Paris, [1889.] 8vo.
- Science et guerre. La télégraphie optique par M. de Nansouty. La cryptographie par H. Mamy. L'éclairage électrique à la guerre, par P. Juppont. Poste par pigeons par G. Richou. Paris, 1888. 8vo.
- NANTYMWYN LEAD MINE, *Carmarthenshire*. Report . . . on the . . . Explosion of Gelatine Dynamite. Lond. 1892. folio.
- NAPIER, N.Z. Harbour Board. Contract No. 13. First Section of Breakwater. Specification of Works, etc. *Tract.* folio. vol. 42. Napier, [1886.] folio.
- Harbour of Napier. Report. Wellington, 1875. folio.
- NAPIER, Sir C., *General*. Replies to passages in the lately-published diary of General Sir C. Napier, affecting Lieutenant-General Sir R. England, G.C.B. [By A. F. W. M.] *Tract.* 8vo. vol. 183. (For private circulation.) [1858?] 8vo.
- NAPIER, F. Notes of a voyage from New South Wales to the north coast of Australia. [Glasgow, 1875?] 8vo.
- NAPIER, JAMES. A Manual of Electro-Metallurgy. . . 4th edition. Lond. 1860. 8vo.

- NAPIER, JAMES M. Inspection of European Mints. Report. *Tract.* 8vo. vol. 363. Lond. 1870. 8vo.
- NAPIER, JAMES R. On the most profitable Speed for a fully-laden Cargo-steamer for a given voyage. *Tract.* 8vo. vol. 158. Glasgow, 1865. 8vo.
- NAPIER, JOHN. De arte logistica Johannis Naperi Merchistonii Baronis libri qui supersunt. [Edited by Mark Napier.] Edinburgh, 1839. 4to.
- NAPIER, R. Machinery of the British and North American Royal Mail Steam Ship "Arabia" and of the Royal Mail Steam Ship "La Plata." Lond. [1850?] folio.
- NAPIER, R., and OTHERS. Report on the Plans for preventing Accidents on board of Steam Vessels. *Tract.* 8vo. vol. 55. Glasgow, 1839. 8vo.
- NAPIER, R. A. Manual of Navigation. Glasgow, 1877. 8vo.
- NAPIER, Hon. W. Soft water from the Surrey Sands. *Tract.* 8vo. vol. 274. Lond. 1851. 8vo.
- NAPIER, Hon. W., and HOPE, W. Metropolitan Board of Works. proposition for a concession of the Sewage of the Northern Area of the Metropolis. *Tract.* 8vo. vol. 478. Lond. 1861. 8vo.
- NAPIER, Hon. W., and OTHERS. Metropolitan Board of Works. Letters in reference to the proposed Concession of the Sewage of the Northern Area of the Metropolis to Messrs. Napier and Hope. *Tract.* 8vo. vol. 478. Lond. 1862. 8vo.
- NAPLES. Programma di concorso per la costruzione di due bacini da carenaggio ed opere accessorie nel porto di Napoli. Roma, 1891. 8vo.
- Sulle bonificazione delle paludi esistenti nelle provincie di terra ferma dell' ex-Regno di Napoli. *Tract.* folio. vol. 33. Milano, 1876. folio.
- Verbate delle sedute tenute dalla commissione sopra un progetto di porto per la città di Napoli. *Tract.* 4to. vol. 73. Genova, 1861. 4to.
- Associazione fra gli utenti di caldaie a vapore. Rapporto dell' ingegnere direttore F. Sinigaglia al consiglio direttivo. Esercizio 1891, etc. Napoli, 1892, etc. 8vo.
- Collegio degl' ingegneri ed architetti. Atti. 1876–83. Napoli, 1878–83. 8vo.
- Reale istituto d'incoraggiamento alle scienze naturali. Atti. Vols. 1 to 5. Napoli, 1811–34. 4to.
- — 4th series. Vol. 6. Napoli, 1893. folio.
- NAPOLEON I. Histoire des campagnes de l'empereur Napoléon. (Atlas of plates.) Paris, 1842. 4to. and folio.
- NAPOLEON, Prince. Visites et études au Palais de l'Industrie ou guide pratique et complet à l'Exposition Universelle de 1855. Pt. 1. *Tract.* 8vo. vol. 395. Paris, 1855. 12mo.

- NAPP, R. *The Argentine Republic, etc.* *Buenos Aires*, 1876. 8vo.
- NARDINI, F. *Roma antica*. Edizione quarta. 4 vols.
Roma, 1818. 8vo.
- NARES, *Admiral Sir G. S.* *Journal of the Arctic Expedition, 1875-76.*
See PARLIAMENTARY PAPERS.—ARCTIC EXPEDITION.
- Reports on Ocean Soundings. 1873. *See* CHALLENGER, *H.M.S.*
- Seamanship. 6th edition, enlarged . . . by Lieut. A. C. Bromley, R.N. *Portsmouth*, 1882. 8vo.
- NARES, *Sir G. S.*, HARTLEY, *Sir C. A.*, and BARRY, *J. W.* *The Ribble Navigation Commission. Interim (and final) Report to the Board of Trade.* *Lond.* 1889-91. folio.
- NASMITH, J. *Modern Cotton Spinning Machinery, its principles and construction.* *Manchester*, 1890. 4to.
- NASMYTH, J. *James Nasmyth, Engineer: an autobiography, edited by S. Smiles.* *Lond.* 1883. 8vo.
- NASON, H. B. *See* ELDERHORST, W. *Manual of Qualitative Blow-pipe Analysis . . . [Revised] by H. B. Nason.* 1881.
- NATAL. *Coal-Fields of Natal; Klip River, Weenan, Umvoti and Victoria Counties.* Report by F. W. North. *Lond.* 1881. folio.
- Natal Harbour Board. *Chairman's Minute and Departmental Reports for the year 1887, etc.* *Durban*, 1888, etc. folio.
- Harbour Board. *Natal Harbour Works. Report by the Resident Marine Engineer, C. W. Methuen.* *Durban*, 1889. folio.
- NATHAN, M., *Lieut. R.E.* *Notes of Six Lectures on Iron and Steel as applicable to Engineering . . . by Dr. Percy, etc.* *Lond.* 1883. 8vo.
- NATIONAL ASSOCIATION FOR THE PROMOTION OF SOCIAL SCIENCE. *Transactions, 1857-84.* *Lond.* 1858-85. 8vo.
- NATIONAL ASSOCIATION OF BRITISH AND IRISH MILLERS. *Annual Report.* *Lond.* 1885-89. 8vo.
- NATIONAL ASSOCIATION OF BUILDERS OF THE UNITED STATES OF AMERICA. *Official Report. 1st (2nd, etc.) Annual Convention, etc.* *Boston*, 1887, etc. 8vo.
- NATIONAL BENEVOLENT EMIGRATION FUND. *Correspondence with Her Majesty's Government on Emigration. Tract. 8vo. vol. 88.* *Lond.* 1850. 8vo.
- NATIONAL BOILER INSURANCE COMPANY. *Chief Engineer's Reports, 1867 (1868, etc.).* *Manchester*, 1868, etc.
- Report on the Boiler which exploded at R. Fletcher & Son's Paper Mills, Stoneclough, June 16. *Tract. folio. vol. 28.* *Manchester*, 1879. folio.
- NATIONAL COLONIAL EMIGRATION SOCIETY. *Report of a public meeting of the . . . Society . . . 1863. Tract. 8vo. vol. 140.* *Lond.* 1863.

- NATIONAL CONFERENCE OF ELECTRICIANS.** *New York.* Proceedings. *New York*, 1884–85. 12mo.
- NATIONAL CONVENTION FOR THE PROTECTION OF AMERICAN INTERESTS.** *New York.* Proceedings . . . 1841. *Tract. 8vo. vol. 54.* *New York*, 1842. 8vo.
- NATIONAL CONVENTION OF FARMERS AND GARDENERS.** *New York.* Proceedings of the Convention . . . held at the American Institute . . . October 1844, and during the seventeenth annual fair. With a list of the premiums awarded on that occasion. *Tract. 8vo. vol. 61.* *New York*, 1845. 8vo.
- NATIONAL CONVENTION OF IRON AND STEEL MANUFACTURERS, AND IRON ORE PRODUCERS.** Proceedings . . . at Cresson . . . Sept. 12th and 13th, 1882. *Tract. 8vo. vol. 457.* *Philadelphia*, 1882.
- NATIONAL EDUCATION UNION.** A Verbatim Report, with indices, of the debate in Parliament during the progress of the Elementary Education Bill, 1870. *Lond.* [1870.] 8vo.
- Authorised Report of the Educational Congress, held in the Town Hall, Manchester. *Tract. 8vo. vol. 205.* *Manchester*, 1869. 8vo.
- NATIONAL FISH CULTURE ASSOCIATION.** Journal. Vol. 1, pts. 1–3. *Lond.* 1887. 8vo.
- NATIONAL HEATING COMPANY.** Report of the Board of Experts on the Central Station Heating and Power Supply System of the National Heating Company. *Tract. 8vo. vol. 480.* *New York*, 1888. 8vo.
- NATIONAL LIFEBOAT INSTITUTION.** See ROYAL NATIONAL LIFEBOAT INSTITUTION.
- NATIONAL PORTRAIT GALLERY.** Catalogue of the pictures in the National Portrait Gallery, 29, Great George Street, Westminster. *Tract. 8vo. vol. 115.* *Lond.* 1859. 8vo.
- NATIONAL SHIP BUOYING AND TOWING COMPANY.** Prospectus. *Tract. 8vo. vol. 485.* *New York*, 1872. 8vo.
- NATIONAL SMOKE ABATEMENT INSTITUTION.** Report of the Council, etc. *Tract. 8vo. vol. 381.* *Lond.* 1884. 8vo.
- NATIVE GUANO COMPANY.** Native Guano: results of its practical application in the Farm and Garden, etc. *Tract. 8vo. vol. 435.* *Lond.* 1886–87. 8vo.
- Reports by Sir J. W. Bazalgette and T. Keates, relative to the experimental operations of the . . . Company at Crossness. *Tract. 8vo. vol. 435.* *Lond.* 1873. 8vo.
- [Various Reports relating to the Company.] *Tract. 8vo. vol. 372.* [*Lond.*] 1869–75. folio and 8vo.
- NATORP, G.** The Coal Industry of the Lower Rhine and of Westfalia. *Tract. 8vo. vol. 414.* *Düsseldorf*, 1880. 8vo.

NATRUS, L. VAN, VUUREN, C. VAN, and POLLY, J. Groot volkom moolenboek ; of naauwkeurig ontwerp van allerhande tot nog t bekende . . . soorten van moolens. 2 vols. in 1.

Amsterdam, 1734–36. fol.

NAUMANN, A. Heizungsfrage mit besonderer Rücksicht a Wassergaserzeugung und Wassergasheizung, etc. *Tract. 8vo. rol. 330. Giessen, 1881. 8v*

— Lehr- und Handbuch der Thermochemie.

Braunschweig, 1882. 8v

NAVAL EXHIBITION. See LONDON.—EXHIBITIONS.

NAVIER, L. M. H. Considérations sur les principes de la police roulage, et sur les travaux d'entretien des routes, etc.

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— Note sur le mouvement uniforme des waggon dans les part des chemins de fer qui sont tracées en ligne courbe. *Tract. 8vo. rol. 60. Paris, 1835. 8v*

— On the Means of comparing the respective Advantages different Lines of Railway ; and on the use of locomotive engine Translated . . . by Sir J. Macneill. *Tract. 8vo. rol. 32. Lond. 1836. 8v*

— Rapport et mémoire sur les ponts suspendus. (Atlas of plates)

Paris, 1823. 4to. and fol.

— Résumé des leçons d'analyse données à l'École Polytechnique Suivi des notes par M. J. Liouville. Revue par M. E. Liouville 2^{me} édition. 2 pts. in 1 vol.

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— Résumé des leçons de mécanique données à l'École Polytechnique

Paris, 1841. 8v

— Résumé des leçons données à l'École des Ponts et Chaussées : l'application de la mécanique à l'établissement des constructions et des machines . . . Deuxième édition. pt. 1.

Paris, 1833. 8v

NAVILLE, J. De l'assainissement des terres et du drainage. Sur du drainage profond, par Parkes, traduit de l'anglais par Saint Germain Leduc. *Tract. 8vo. rol. 247. Paris, [1851.] 12v*

NAYLOR, W. Analysis of Evidence before the Sheffield Jury on the cause of the Failure of the Bradfield Reservoir. *Tract. 8vo. 173. Lond. 1864. 8v*

— Motive Power and Break-power on Railways. *Tract. 8vo. 166. Lond. 1868. 8v*

- NAYLOR, W., *Assoc. M. Inst. C.E.* Ribble Joint Committee. Report on the nature and treatment of Manufacturers' Waste Effluents. *Tract. 8vo. vol. 516.* Preston, 1893. 8vo.
- NAZZANI, J. C. *Idraulica matematica e pratica.* 4 vols. (Atlas of plates.) Palermo, 1876-77. 8vo.
- NEALE, D. H. Recent Locomotives : illustrations with descriptions and specifications, etc. New York, 1883. folio.
- — — Enlarged edition. New York, 1886. folio.
- NEALLY, G. T. Tables for computing Earthwork. [1880 ?] folio. (Lithographed.)
- NEATH CANAL. Act (amended act) for making and maintaining a Canal . . . from or near . . . Abernant, in the county of Glamorgan to and through . . . the Brickfield near Melincrythan Pill into the River Neath, near the town of Neath, etc. Lond. 1791-98. folio.
- NEAVE, D. The Moulders' Ready Reckoner, giving the correct weight of Castings, and how to find them. 4th edition . . . enlarged. Aberdeen, [] 12mo.
- NEBRASKA. Preliminary Report of Explorations in Nebraska and Dakota in 1855-57 by Lieut. G. K. Warren. Washington, 1875. 8vo.
- NEEDHAM, W. Memoir of William Adams, Cardiff . . . Born, 1813. Died, 1886. *Tract. 8vo. vol. 445.* Newport, 1887. 8vo.
- NEFTTEL, K. Report on Wool and Silk Machinery. [*U.S.A. 10th Census.* Vol. XXII.] Washington, 1880. 4to.
- NEGRETTI, E. A. L., and ZAMBRA, J. W. A Treatise on Meteorological Instruments, etc. Lond. 1864. 8vo.
- NEGRI, P. Osservazioni alla nota XIII "Équations numériques" par Lagrange. *Tract. 4to. vol. 18.* Milano, 1820. 4to.
- NEIL, A. Annual Report on Meteorological Observations in the Punjab, 1867. See INDIA.—PUNJAB.
- NEILSON, J. B. Neilson and others v. Baird & Co. Bill of exceptions for the defenders, with the record, etc., appended. *Tract. 4to. vol. 35.* [1843 ?] 4to.
- The Trial of the issues in the action of count, reckoning, payment, and damages, at the instance of Neilson and others against Baird & Co. ; for the infringement of a patent for smelting iron. Reported by W. Oliver. Edinburgh, 1843. 4to.
- NELL, F. Report on Water Power, etc. [By F. Nell and J. Fraser.] 1892. See INVERNESS.
- NELSON, *Lancs.* Report on . . . the private Slaughter-houses within the Borough and as regards the provision of an Abattoir : by J. W. Bradley, Borough Surveyor. Nelson, 1893. 8vo.

NELSON, N.Z. Railway from Nelson to the West Coast. *Report. Tract. folio. vol. 16.* Nelson, 1868. folio.

— Construction of a Railway between Nelson and the West Coast. (Official Report.) Wellington, 1875. folio.

NELSON, J. Address to the holders of Atlantic and Great Western Railway and Erie Railway Securities in England. *Tract. 8vo. vol. 179.* Lond. 1869. 8vo.

— Emigration to North America. *Tract. 8vo. vol. 176.* Lond. 1869. 8vo.

— Grand Trunk Railway of Canada. Address to the bond and stock-holders, with introduction and Appendix, including the . . . pamphlet, "A few reasons why the Grand Trunk Railway does not pay." 2nd edition. *Tract. 8vo. vol. 179.*

Lond. 1869. 8vo.

— Speech at the adjourned half-yearly Meeting of the Grand Trunk Railway Company of Canada. *Tract. 8vo. vol. 179.*

Lond. 1869. 8vo.

NELSON, T. J. An incredible story, told in a Letter to the . . . Earl of Beaconsfield. [Relating to the pollution of the River Thames by the sewage of certain riverside towns.] *Tract. 8vo. vol. 306.* Lond. 1879. 8vo.

— Reprint of a speech addressed to the Local Board of Hampton Wick, on the subject of the separation of the Rainfall from the House Sewage. *Tract. 8vo. vol. 307.* Kingston, 1879. 8vo.

NENE, River. An Act for the Improvement of the River Nene.

Lond. 1794. folio.

— On the Drainage of the Nene Valley. Reports submitted to a public meeting of proprietors. *Tract. 8vo. vol. 217.*

Lond. 1848. 8vo.

— Papers in reference to the local inquiry held before J. G. Cockburn Curtis. Lond. 1862. folio.

— Remarks on the River Nene Improvement Scheme. *Tract. 8vo. vol. 225.* Peterborough, [1870?] 8vo.

— Report of the proceedings of the Committee for taking into consideration Mr. Rennie's reports on the improvement of the outfall of the river Nene. *Tract. 8vo. vol. 159.* Wisbech, 1821. 8vo.

NEPVEU, C. Note sur les fondations en rivières. *Tract. 8vo. vol. 101.* Paris, [1860?] 8vo.

NESBIT, A. A complete Treatise on practical Land-surveying, in all its departments . . . 9th edition. To which are now added Plane Trigonometry, and Railway Engineering. Lond. 1847. 8vo.

— Field-book for Nesbit's Land-surveying. 7th edition. *Tract. 8vo. vol. 166.* York, [1840?] 8vo.

- NESBIT, J. C. On Agricultural Chemistry, and the nature and properties of Peruvian Guano. 5th edition. *Lond.* 1856. 8vo.
- NESSENIUS, —. Der Strassenbau. 1892. See BARKHAUSEN, G., NESSENIUS, —, and HOUSELLE, —.
- NETHERSOLE, W. See GLEN, A. The Highway Acts, 1862–1878. . . . With a paper on the Construction and Repair of Roads by W. Nethersole. 1879.
- NETHERWAY, R. Suggestions for improving the sanitary state of London and its environs, etc. *Tract.* 8vo. vol. 88. *Lond.* 1850. 8vo.
- NEUBERG, J. Sur les cercles de Tucker. *Tract.* 8vo. vol. 414. [1885?] 8vo.
- NEUMAN, H., and BARETTI, G. A Dictionary of the Spanish and English Languages . . . Revised and enlarged . . . by M. Seoane. New edition. 2 vols. *Lond.* [1854.] 8vo.
- NEVADA. Preliminary report [from the Corps of Engineers] concerning Explorations and Surveys principally in Nevada and Arizona. 1871. *Washington*, 1872. 4to.
- Preliminary report upon a Reconnaissance through Southern and South Eastern Nevada made in 1869 by Lieuts. Wheeler and Lockwood. *Tract.* 4to. vol. 74. *Washington*, 1875. 4to.
- NEVE, R. Mathematicks made plain, in the solution of variety of useful propositions. *Lond.* 1708. 12mo.
- NEVEU, F., and HENRY, L. Traité pratique du laminage du fer. (Atlas of plates.) *Paris*, 1881. 8vo. and folio.
- NEVILLE, J. Hydraulic Tables, coefficients, and formulæ for finding the discharge of water from orifices, notches, weirs, pipes, and rivers. *Lond.* 1853. 8vo.
- — 2nd edition, with extensive additions, new formulæ, tables and general information on rainfall catchment-basins, drainage, sewerage, water-supply for towns and mill power. *Lond.* 1860–61. 8vo.
- The Hydrodynamics of Blue Books and of the Metropolitan Drainage Reports. *Tract.* 8vo. vol. 105. [*Lond.* 1858.] 8vo.
- An Investigation of some Formulæ for finding the maximum amount of resistance, acting in any direction, required to sustain banks of earth or other materials, etc. *Tract.* 8vo. vol. 84. *Dublin*, 1849. 8vo.
- — [Another edition.] *Tract.* 8vo. vol. 101. [*Dublin*, 1849?] 8vo.
- NEVILLE, P. A Description of Wood and Asphalte Pavement for streets in cities and towns. *Tract.* 8vo. vol. 419. *Dublin*, 1886. 8vo.

NEVILLE, P.—*continued*. Report to the Right Hon. the Lord Mayor . . . of the City of Dublin, on the general state of Public Works of the City under their control. *Dublin*, 1869. 8vo.

— River Skane District, County of Meath. Report . . . on the Drainage and Improvement of the Lands in the above District. *Dublin*, 1847. 8vo.

NEVILLE, R., and MACNAMARA, W. H. Reports of cases decided by the Railway Commissioners. [Vols. 4–7 by J. H. B. Browne and W. H. Macnamara.] 7 vols. *Lond.* 1874–91. 8vo.

NEW BEDFORD, *Mass.* Contract [and Specifications] for the Construction of the New Bedford Waterworks. *Tract.* 8vo. vol. 186. *New Bedford*, [1866.] 8vo.

— Report of the joint special committee of the city council of New Bedford, on the introduction of fresh-water; with the report of W. J. McAlpine, civil engineer, and the analysis of Prof. Chace. *Tract.* 8vo. vol. 186. *New Bedford*, 1865. 8vo.

— Report on the trial of the pumping engine of the Waterworks in . . . New Bedford. *Tract.* 8vo. vol. 204. *New Bedford*, 1870. 8vo.

— Specifications for the construction and erection of a Condensing Beam Pumping Engine and two Boilers for the New Bedford Waterworks. *Tract.* 8vo. vol. 186.

[*New Bedford*, 1866 ?] 8vo.

NEW BRUNSWICK UNIVERSITY. Calendar 1877–88(–1889–90). *Saint John, N.B.*, 1887–89. 8vo.

NEW GRANADA. New Granada and Costa Rica. Boundary question. *Tract.* 8vo. vol. 440. *Lond.* [1852.] 8vo.

NEW MEXICO. Systematic catalogue of Vertebrata of the eocene of New Mexico. By E. D. Cope. *Tract.* 8vo. vol. 254.

Washington, 1875. 8vo.

NEW ORLEANS LIGHTERING AND WRECKING COMPANY. Law, Act of Incorporation, Bye-laws. *Tract.* 8vo. vol. 199.

New Orleans, 1867. 8vo.

NEW RIVER COMPANY. An Act to enable the Governor and Company of the New River to improve their Supply of Water.

Lond. 1852. folio.

NEW SOUTH WALES. [An Album of Photographs of various parts of New South Wales.] obl. 4to.

— [*Astronomy.*] Observations of the Transit of Venus, 9 December, 1874; made at places in New South Wales under the direction of H. C. Russell, Government Astronomer. *Sydney*, 1892. 4to.

— — See also SYDNEY.—[*Observatory.*]

— [*Caves and Rivers.*] Exploration of the Caves and Rivers of New South Wales. Reports, Minutes, etc. *Sydney*, 1882. folio.

— [*Census.*] Census of New South Wales, 1871. Pts. 4–6. Education, Social Conditions, and Occupation. *Sydney*, 1873. folio.

- NEW SOUTH WALES.—[*Census*].—*continued*. Statistician's Report on the Eleventh Census. First instalment. *Sydney*, 1893. 4to.
- [Coke.] Report on Manufacture of Coke in New South Wales. *Sydney*, 1890. folio.
- [Dredgers.] Report on Dredgers. *Sydney*, 1881. folio.
- — See also *infra* :—[*Harbours and Rivers*.]
- [Education.] Report of the Board of Technical Education for 1888 ; and Calendar of Sydney Technical College for 1889. *Sydney*, [1889.] 8vo.
- Report . . . relating to the proposed College for the Training of Teachers of Public Schools. *Sydney*, 1891. folio.
- Report upon certain Museums of Technology, Science, and Art, also upon scientific, professional and technical instruction, and systems of evening classes in Gt. Britain and on the Continent of Europe, by A. Liversidge. *Sydney*, 1880. folio.
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- Public Accounts for the year 1889 : accompanied by the 19th annual report of the Auditor-General. *Sydney*, 1890. folio.
- [Fisheries.] Report from the Select Committee on Working of the Fisheries Act, *etc.* *Sydney*, 1889. folio.
- Report of the Commissioners, 1888. *Sydney*, 1889. folio.
- [Harbours and Rivers.] Report by the Engineer-in-Chief for Harbours and Rivers on Dredging Operations. *Sydney*, 1889–91. folio.
- [History, Progress, *etc.*] Blue Book of New South Wales, for the year 1882 (1883, *etc.*). *Sydney*, 1883, *etc.* folio.
- New South Wales ; its progress and resources. *Tract*. 8vo. vol. 398. (Official.) *Sydney*, 1876. 8vo.
- The Progress, Present Condition and Resources of New South Wales. *Sydney*, 1886. 8vo.
- — 2nd edition. *Sydney*, 1886. 8vo.
- History and Resources of New South Wales. Special edition of the Year Book. *Sydney*, 1891, *etc.* 8vo.
- See also *infra* :—[*Statistics*.]
- [Internal Communication.] Second (3rd and 4th) Report on the Internal Communication of New South Wales. By Capt. Martindale. *Sydney*, 1859–60. folio.
- [Lunatic Asylums.] Report on Lunatic Asylums, by Dr. F. N. Manning. *Sydney*, 1868. folio.

- NEW SOUTH WALES—*continued*. [*Meteorology*.] Diagram of Isothermal Lines shewing mean shade temperature for New South Wales, for the Year. Drawn . . . under the direction of H. C. Russell. *Sydney*, 1892. 8vo.
- Results of Rain Observations made in New South Wales, during 1878. *Sydney*, 1879. 8vo.
- [*Continued as :*]
Results of Rain and River Observations made in New South Wales, during 1879 to 1885. Maps and Plates. *Sydney*, 1880–1886. 8vo.
- Results of Rain and River Observations made in New South Wales and Part of Queensland, during 1886. *Sydney*, 1887. 8vo.
- Results of Rain, River, and Evaporation Observations made in New South Wales during 1887, 1888, *etc.* *Sydney*, 1888, *etc.* 8vo.
- Results of Meteorological Observations, by H. C. Russell, made in New South Wales during 1885, *etc.* *Sydney*, 1887, *etc.* 8vo.
- [*Mines and Minerals*.] Annual Report of the Department of Mines. *Sydney*, 1877, *etc.* 4to. and folio.
- Annual Report of the Stock and Brands Branch of the Department of Mines. *Sydney*, 1889. folio.
- Mineral Map and General Statistics of New South Wales. *Tract*. 8vo. vol. 398. *Sydney*, 1876. 8vo.
- Mineral Products of New South Wales, *etc.* [*Dept. of Mines*.] *Sydney*, 1882–87. 4to.
- New South Wales: its Mineral Wealth, *etc.* [*Int. Exhibition of Mining and Metallurgy*, London, 1890.] *Lond.* 1890. 8vo.
- Report on the Tin Bearing Country, New England, by C. S. Wilkinson. *Sydney*, 1873. folio.
- [*Postal Department*.] Postal Guide . . . July, 1892. *Sydney*, 1892. 8vo.
- 33rd Annual Report of the Postmaster-General, for 1887. *Sydney*, 1888. folio.
- [*Public Works*.] Annual Statement of Works carried out by the Public Works Department, 1888 (1891). *Sydney*, 1889–92. folio.
- General Report of the Parliamentary Standing Committee on the Public Works of New South Wales. *Sydney*, 1888, *etc.* folio.
- [*Railways*.] Annual Reports of the Railway Commissioners for the years ending 30th June, 1889 and 1890, together with Quarterly Reports; the Government Railways and Public Works Acts; Appointments of Commissioners; Reports on the Condition of Permanent-Way and Rolling Stock; Bye-Laws, *etc.*, *etc.* *Sydney*, 1889–1890. folio.
- Diagram of gradients on New South Wales Railways. *Sydney*, 1894. obl. 8vo.

- NEW SOUTH WALES.—[*Railways*]*—continued.* [Reports on the Origin, Construction and Working of the Railways of New South Wales from 1846–76 inclusive, by J. Rae, Commissioner for Railways.] *Sydney*, 1866–77. folio.
- Report of the Commissioner of Railways and Tramways for the years 1883, *etc.* *Sydney*, 1884, *etc.* folio.
- Correspondence in reference to Railway Differential Rates. *Sydney*, 1888. folio.
- Correspondence on subject of Rails. *Sydney*, 1875. folio.
- Correspondence respecting the charges made by Mr. Schey . . . against the Chief Commissioner for Railways. [Sydney, 1892.] folio.
- Report of the Royal Commission appointed to inquire into the charges made against E. M. G. Eddy, Chief Commissioner of Railways, preferred by W. F. Schey, *etc.* *Sydney*, 1892. folio.
- Description of the lines and works of construction of the railways of New South Wales, by J. Whitton. *Sydney*, 1876. folio.
- — Plates, sections and maps. 3 vols. *Sydney*, 1876. folio.
- Evidence taken on the construction of Railway Works. *Sydney*, 1860. folio.
- Guide to the Railways of New South Wales. *Sydney*, 1879. 4to.
- Inferior Railway Iron obtained from England. *Sydney*, 1875. folio.
- Papers relating to Railway Extension Contracts. *Sydney*, 1860. folio.
- Petitions for Railways. 1867. folio.
- Rails for the proposed extensions to Wagga Wagga, Orange, and Tamworth Railways. *Sydney*, 1873. folio.
- Report of the Board appointed to enquire into the efficiency of the Westinghouse and vacuum continuous brakes for goods trains. *Sydney*, 1891.
- — Correspondence relating to the Report, *etc.* *Sydney*, 1891. folio.
- Report of Mr. R. Price-Williams, C.E., on the Condition of the Permanent Way and Works of Railways in New South Wales. *Sydney*, 1889. folio.
- Report of Mr. R. Price-Williams, C.E., on the Condition of the Rolling Stock of Railways in New South Wales. *Sydney*, 1889. folio.
- Report of the Royal Commission appointed to inquire into the stability of certain Iron Bridges constructed on the existing lines of Railway; and also of the Timber Approaches to the Bridge over the Murrumbidgee River, at Wagga Wagga, *etc.* *Sydney*, 1886. folio.
- Report of William Thow, M.I.M.E., on condition of Rolling Stock in New South Wales. *Sydney*, 1889. folio.

- NEW SOUTH WALES.—[*Railways*].—*continued*. Report on Railways in course of construction. (Map.) *Sydney*, 1878. folio.
- [Report on Trials of a ten-wheeled Baldwin Engine, made by H. Kidd and R. Pollock.] [1892.] folio.
- Report of the Royal Commission of Inquiry into the alleged defectiveness and unsuitability of the Baldwin Locomotives, *etc.* *Sydney*, 1892. folio.
- Further Papers respecting fifty colonial-made Railway Locomotives. *Sydney*, 1889. folio.
- Joint Report by Messrs. H. Richardson, C. H. Stanger, and D. H. Neale, relating to tests with the new American Engines. [1892.] folio.
- Report . . . relating to the proposed Railway from Kiama to Nowra. *Sydney*, 1890. folio.
- Report . . . relating to the proposed Railway from Nyngan to Cobar. *Sydney*, 1890. folio.
- Reports upon Trial Surveys for the future extension of Railways. *Sydney*, 1874. folio.
- Return relating to Trail Surveys. *Sydney*, 1883–84. folio.
- [Time tables and general information regarding the Government Railways.] (Titlepage wanting.) [Sydney, 1892.] 8vo.
- [*Royal Society of New South Wales*.] See ROYAL SOCIETY OF NEW SOUTH WALES.
- [*Statistics*.] Annual reports on Vital Statistics. *Sydney*, 1874–75. folio.
- Statistical Register. *Sydney*, 1871, *etc.* folio.
- [*Survey*.] Base line for triangulation. Reports from surveyor general. *Sydney*, 1871. folio.
- [*Tanks and Wells*.] Royal Commission of Inquiry into Construction of Public Tanks and Wells. Report, minutes of evidence, and appendices. *Sydney*, 1888. folio.
- [*Water Conservation*.] First(–Third) Report of the Commissioners. *Sydney*, 1885–87. folio.
- Progress Report on Water Conservation. By H. G. McKinney. *Sydney*, 1891. folio.
- Report on Artesian Boring : by J. W. Boulton. *Sydney*, 1891. folio.

NEW YORK CITY.

- [*Harbour*.] Report of the Commission appointed to devise a plan for defending the Harbour of New York. *Tract*. 8vo. vol. 199. *Albany*, 1862. 8vo.
- [*Public Works*.] Annual report of the Commissioner of Public Works, 1870–71 (1872, 78, 79). *New York*, 1871–79. 8vo.
- [*Streets and Improvements*.] [Contracts, Specifications, *etc.*, for paving with Macadamized Pavement. *New York*, 1878. obl. folio.

NEW YORK CITY.—[*Streets and Improvements*]*—continued.* Communication from the Landscape Architect and the Civil and Topographical Engineer, in relation to the proposed plan for laying out the Central District of the 23rd and 24th Wards, *etc.* [*Dept. of Public Parks.*] *Tract.* 8vo. vol. 293. *New York*, 1877. 8vo.

— Report of the Landscape Architect and the Civil and Topographical Engineer upon the laying out of the 23rd and 24th Wards. [*Dept. of Public Parks.*] *Tract.* 8vo. vol. 293. *New York*, 1876. 8vo.

— [*Transit.*] The Elevated Railway, *New York.* *Tract.* 8vo. vol. 289. 1878. 8vo.

— Quick transit in *New York city.* The Arcade railway. Voice of the press. *Tract.* folio. vol. 13. [1868.] folio.

— Report of the Civil and Topographical Engineer and the Landscape Architect accompanying a plan for local steam transit routes in the 23rd and 24th Wards. [*Dept. of Public Parks.*] *Tract.* 8vo. vol. 293. *New York*, 1877. 8vo.

— Report by the Board of Engineers on the subject of Rapid Transit through *New York.* *Tract.* 8vo. vols. 207 and 435. *New York*, 1870, 84. 8vo.

— Report of the Board of Rapid Transit Commissioners, *etc.* *New York*, 1891. 8vo.

— [*Water Supply.*] Aqueduct Commission. Reports on researches concerning the design and construction of High Masonry Dams in view of the proposed building of Quaker Bridge Dam. By B. S. Church, A. Fteley, and a board of experts, *etc.* *New York*, 1889. 4to.

— Report to the Aqueduct Commissioners by the President . . . containing reports of the Secretary . . . and of the Chief Engineer, B. S. Church, giving a review of the work of the Aqueduct Commission to January First, A.D. 1887, including the plans and work of construction of the New Croton Aqueduct to that date, *etc.* *New York*, 1887. 4to.

NEW YORK STATE.

— [*Canals and Rivers.*] Annual Reports of the Canal Commissioners, 1853–74. 10 vols. *Albany*, 1854–75. 8vo.

— Annual report of the State Engineer and Surveyor on the Canals of the State of *New York*, 1853–80. 12 vols. *Albany*, 1854–80. 8vo.

— Annual Report of the State Engineer and Surveyor [on the Canals and Rivers], 1888 (1890). *Albany*, 1889, 91. 8vo.

— Laws of the State of *New York*, in relation to the Erie and Champlain Canals, together with the annual reports of the Canal Commissioners, and other documents, requisite for a complete official history of those works. 2 vols. *Albany* 1825. 8vo.

- NEW YORK STATE.—[*Canals and Rivers*].—*continued*. Public Documents relating to the New York Canals, which are to connect the western and northern Lakes with the Atlantic Ocean, *etc.* *New York*, 1821. 8vo.
- Report of a Committee of the Chamber of Commerce of New York on Canal Navigation by Steam. *Tract. 8vo. vol. 350.* *New York*, 1858. 8vo.
- Steam Towage on the Canals, by means of a submerged wire cable. Report of a Committee of the New York Chamber of Commerce. *Tract. 8vo. vol. 237.* *New York*, 1871. 8vo.
- Report of the Auditor of the Canal Department, of the Tolls, Trade, and Tonnage of the Canals of the State of New York for the year 1850 (1851, 54, 1857–74). 19 vols. *New York*, 1851–75. 8vo.
- [Capitol.] Annual Report of the New Capitol Commissioners, 1869 (1870). 2 pts. *New York*, 1870–71. 8vo.
- [Coal.] Special report on Coal: showing its distribution, classification and cost delivered over different routes to various points in the State of New York. By S. H. Sweet. *New York*, 1866. 8vo.
- [Finance]. Annual report of the Comptroller for the fiscal year ending Sept. 1872. *Albany*, 1873. 8vo.
- [Health.] Annual Report of the State Board of Health. *Albany*, 1881, *etc.* 8vo.
- Monthly Bulletin of the State Board of Health. *New York*, 1887, *etc.* obl. 8vo.
- An Act for the preservation of the Public Health, and the registration of vital statistics. *Tract. 8vo. vol. 456.* 1888. 8vo.
- Local Boards of Health in the State of New York. *Albany*, 1890. 8vo.
- Report on School Hygiene: being a sanitary examination of the condition of the public schools of the Interior. *Albany*, 1888. 8vo.
(From the Report of the State Board of Health.)
- [Library.] Sixty-Ninth Annual Report, 1886. *Albany*, 1887. 8vo.
- [Meteorology.] Results of a series of meteorological observations at sundry academies in the State of New York. Compiled by Dr. F. B. Hough. *Albany*, 1855. 4to.
- [Railways.] Annual Report of the Railroad Commissioners and the tabulations and deductions from the Reports of the Railroad Corporations, for the year 1855 (1856, 61, 63–66). 7 vols in 8. *Albany*, 1856–67. 8vo.
- [Continued as:]
Annual Report of the State Engineer and Surveyor, *etc.*, for 1867–76. 10 vols. *Albany*, 1868–77. 8vo.

NEW YORK STATE.—[*Railways*].—*continued*. Form of the annual Report of the Railroad Companies of the State of New York, for the year ending 30th September, 1856. *Tract. 8vo. vol. 171.*
[1856.] 4to.

- Drawings of maps, bridges, profiles, coal-burning locomotives, chairs, brakes, splices, *etc.*, accompanying the report of the Board of Railroad Commissioners for 1856. *Albany, 1857. 8vo.*
- Report of the Committee of the New York Senate and State engineer on Railroad Accidents, 1852. *Albany, 1853. 8vo.*
- Report of the Special Committee on Railroads appointed . . . 1879, to investigate alleged abuses in the management of railroads chartered by the State of New York. 5 vols.
Albany, 1880. 8vo.
- [Survey.] Annual report of the Commissioners of the State Survey, 1876–85. *Albany, 1877–86. 8vo.*
- The Final Results of the Triangulation of the New York State Survey, together with a description of the methods employed: also the Eleventh Annual Report of the Commissioners.
Albany, 1887. 4to.
- Report . . . on the Longitude of the Western Boundary Line of the State of New York. *Tract. 8vo. vol. Albany, 1868. 8vo.*

NEW YORK AGRICULTURAL SOCIETY. Transactions: together with an abstract of the Proceedings of the County Agricultural Societies and the American Institute. Vol. 4.
Albany, 1845. 8vo.

- NEW YORK AND BROOKLYN BRIDGE.** Communication (Supplemental communication) from Chief Engineer W. A. Roebling, in regard to the method of Steam Transit over the . . . Bridge. [Brooklyn, 1878.] 8vo.
- Communications to the Board of Alderman of the City of New York, by the President of the Trustees of the . . . Bridge. *Tract. 8vo. vol. 258. Brooklyn, 1876. 8vo.*
- Report of the Board of Consulting Engineers to the . . . New York Bridge Company [on the plans proposed by J. A. Roebling for the Bridge]. *Tract. 8vo. vol. 258. Brooklyn, 1869. 8vo.*
- Report of the Board of Experts on Terminal Facilities, January 10, 1891. Report of the Committee on Improved Traffic Facilities, *etc.* *Tract. 8vo. vol. 510. 1891. 8vo.*
- Report of the Chief Engineer of East River Bridge (W. A. Roebling), on Prices of Materials and estimated Cost of the structure. *Tract. 8vo. vol. 258. [1872.] 8vo.*
- Report of the Chief Engineer on the strength of the Cables and suspended superstructure of the Bridge. *Brooklyn, 1882. 8vo.*
- Report of the Executive Committee of the East River Bridge on the cost of the Structure and Land. *Tract. 8vo. vol. 258. Brooklyn, 1873. 8vo.*

NEW YORK AND BROOKLYN BRIDGE—*continud.* Report of the Special Committee appointed to confer with the president of the Edge Moor Iron Company, with reference to their contracts for steel work. [Brooklyn, 1882.] 8vo.

— Report of the Trustees for . . . 1885. *Tract.* 8vo. vol. 404. [1885.] 8vo.

— Reports of J. A. Roebling to the . . . New York Bridge Company, on the proposed East River Bridge. *Tracts.* 8vo. vol. 258. Brooklyn, 1867, 70. 8vo.

— [Reports of the officers (Executive Committee, Chief Engineer, Superintendent and Treasurer) of the New York Bridge Company to the Board of Directors.] Brooklyn, 1872-77. 8vo.

— State of New York. Testimony taken by the Committee of Commerce and Navigation of the Assembly in relation to the . . . Bridge, etc. Albany, 1879. 8vo.

— [Various Reports and Specifications relating to the East River Bridge.] 1869-78. folio.

NEW YORK AND NEWHAVEN RAILROAD. Report of the Board of Directors. *Tract.* 8vo. vol. 171. New York, 1856. 8vo.

NEW YORK CENTRAL AND HUDSON RIVER RAILROAD. Twentieth [etc.] Annual Report of the Board of Directors, etc. New York, 1889, etc. 8vo. and folio.

NEW YORK, LAKE ERIE AND WESTERN RAILROAD. General Specifications for Iron Bridges. *Tract.* folio. vol. 25. [New York ?] 1879. folio.

— [Various reports, 1855, 1857-78.] New York, 1856-78. 8vo.

NEW YORK SUBMARINE ENGINEERING COMPANY. Prospectus. *Tract.* 8vo. vol. 125. New York, 1860. 8vo.

NEW ZEALAND.

— Correspondence with the Agent General, London. Wellington, 1872-75. folio.

— [Bridges.] Report of the Rakaia Bridge Commission. Christchurch, 1875. folio

— Report on the accident to the Grey Gorge Bridge. Wellington, 1876. folio.

— [Coal.] New Zealand Coal as Fuel for Locomotives. Christchurch, 1877. folio.

— Report of the Committee on Native Fuel [for burning in Locomotives]. Wellington, 1876. folio.

— Papers relating to the Development of Coal Mines, etc. Wellington, 1872. folio.

- NEW ZEALAND.—[*Coal*]*—continued.* Report on the Mount Rochfort Coalfields. *Tract. folio. vol. 16.* Nelson, 1868. folio.
- Report on the Topographical Survey of the Buller Coal Field. Wellington, 1875. folio.
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- Catalogues of the New Zealand Diptera, Orthoptera, Hymenoptera. . . . By F. W. Hutton. Wellington, 1881. 8vo.
- Catalogue of the Tertiary Mollusca and Echinodermata . . . in the Museum: by F. W. Hutton. Wellington, 1873. 8vo.
- Fishes of New Zealand. . . . By F. W. Hutton. Notes on the Edible Fishes by J. Hector, *etc.* Wellington, 1872. 8vo.
- Manual of the New Zealand Coleoptera: by Captain T. Braun. 7 pts. in 3 vols. Wellington, 1880–93. 8vo.
- Manual of the Indigenous Grasses of New Zealand. By F. Buchanan. Wellington, 1886. 8vo.
- Manual of the New Zealand Mollusca. . . . By F. W. Hutton. Wellington, 1880. 8vo.
- Meteorological Reports, 1873 (1875, 77, 80, 83, 85). Wellington, 1873–85. 8vo.
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- Phormium Tenax as a fibrous plant. Edited by Sir James Hector. Second edition. New Zealand, 1889. 8vo.
- Studies in Biology for New Zealand students.
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- Reports of Geological Explorations during 1874–76 (1876–7–1888–9). 5 vols. Wellington, 1877–90. 8vo.

- NEW ZEALAND—*continued*. [*Finance*.] Financial Statement by the Colonial Treasurer. Wellington, 1870–87. folio.
(Statement for 1875 wanting.)
- Papers relating to the Payments to Provinces Act, 1871. Wellington, 1872. folio.
- [*Gold Fields*.] Papers relating to the Supply of Water on the Gold Fields. Wellington, 1871. folio.
- Report of the engineer in chief on public works on the Gold Fields for 1869, and works proposed for 1870. Wellington, 1870. folio.
- Reports on the Goldfields of New Zealand. Wellington, 1871, 72, 75. folio.
- Second Report on the Thames Gold Fields . . . Auckland. . . With . . . analysis of the Rock Specimens: by F. W. Hutton, etc. [*Geol. Survey*.] Wellington, 1869. 8vo.
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- [*Legislative Council*.] Parliamentary Debates, fifth session of the fourth Parliament, No. 6 and 7. Dunedin, 1870. 8vo.
- [*Longitude*.] Measurement of Longitude between Wellington and Otago by electric telegraph. Wellington, 1871. folio.
- [*Meteorology*.] Statistical Tables for the year 1871. Division E.—Meteorology. Wellington, 1872. folio.
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- Return showing Contracts in which penalties have been enforced from 1 July, 1874, to 30 June, 1875, and Contracts in which penalties have accrued but not been enforced during the same period. Wellington, 1878. folio.
- Return showing Contracts in which penalties have accrued and been enforced from 1 July, 1877, to 30 June, 1878, and the contracts in which penalties have accrued but not been enforced during the same period. Wellington, 1878. folio.
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 3. Timaru Harbour Works.
 4. Oamaru Harbour Works.

- NEW ZEALAND.—[*Public Works*]*—continued.* Report of Assistant engineer in chief on Public Works. *Wellington*, 1872. folio.
- Public Works Tables and Annual Reports of the Engineer-in-Chief, March, 1887. 1887. folio.
- [*Railways.*] Correspondence relative to the construction of light Railways. *Wellington*, 1870. folio.
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- Route of Railway Lines in Northern districts of South Island. Report by Mr. Foy. 1878. folio.
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- Annual report on Working Railways, by the New Zealand Railway Commissioners. Wellington, 1892. folio.
- [*Roads.*] Papers on the Construction of Roads in North Island. Wellington, 1871. folio.
- Two papers relating to the Construction of Roads. Wellington, 1872. folio.
- Reports on Roads by Assistant Chief Engineer. Wellington, 1873. folio.
- Reports on the Roads and Works Departments, including construction of Branch-Railways, for the year ending 31st March, 1876. Dunedin, 1876. folio.
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- Reports by Inspector of Surveys. Wellington, 1873, 75. folio.
- Reports on Surveys, by the Engineer-in-Chief. Wellington, 1875. folio.

- NEW ZEALAND.—[*Surveys*].—*continued*. Correspondence relative to the state of the Surveys. *Wellington*, 1875. folio.
- Report by the Surveyor-General on Surveys. *Wellington*, 1877–1887. folio.
- Report on Survey from Canterbury to the West Coast. *Wellington*, 1878. folio.
- Regulations and Instructions of the Survey Department. 3rd edition. *Tract. folio. vol. 40.* *Wellington*, 1886. folio.
- [*Telegraphs.*] Shortland and Tauranga Telegraph. *Wellington*, 1871. folio.
- Seventh annual report of the Telegraphs Department. *Wellington*, 1871. folio.
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- [*Wool.*] Comparative return of Wool exported from . . . New Zealand during the years ending respectively 30th June, 1871 and 30th June, 1872. *Wellington*, 1872. folio.
- NEW ZEALAND AGRICULTURAL COMPANY. Prospectus. *Tract. 8vo. vol. 311.* *Lond.* 1879. 8vo.
- NEW ZEALAND COMPANY. 12th Report of the Directors. (Documents.) *Tract. 8vo. vol. 68.* *Lond.* 1844. 8vo.
- NEW ZEALAND INSTITUTE. Transactions, Vol. 1, (2, etc.) *Wellington*, 1869, etc. 8vo.
- The total eclipse of the sun of the 9th of September, 1885, being a digest of . . . communications to the Institute, etc. *Tract. 8vo. vol. 464.*
- NEW ZEALAND UNIVERSITY. Calendar for 1887, etc. *Wellington, N.Z.*, 1887, etc. 8vo.
- Canterbury College, University of New Zealand. Calendar for the year 1888 (1889, etc.). *Christchurch, N.Z.*, 1888, etc. 8vo.

- NEWALL, D. J. F. *The Highlands of India, etc.* 2 vols.
Lond. 1882-87. 8vo.
- NEWALL, J. *Patent Railway Break. Copy of a letter from the
Railway Department of the Board of Trade. Tract. 8vo. vol. 138.*
Bury, 1859. 8vo.
- *Patent Railway Break, illustrated by reports of experiments
made on the London and North Western, and East Lancashire
Railways. Tract. 8vo. vol. 138.* Manchester, 1854. 8vo.
- NEWALL, R. S. *Facts and Observations relating to the invention
of the Submarine Cable and of the manufacture and laying of
the first cable between Dover and Calais in 1851. Tract. 8vo.*
Lond. 1882. 8vo.
- NEWBERRY, J. S. *Fossil Fishes and Fossil Plants of the Triassic
Rocks of New Jersey and the Connecticut Valley. [U.S. Geol.
Survey. Monograph XIV.]* Washington, 1888. 4to.
- *The Palaeozoic Fishes of North America. [U.S. Geol. Survey.
Monograph XVI.]* Washington, 1889. 4to.
- *Report of Progress, Geological Survey of Ohio. 1871. See OHIO.*
- NEWBIGGING, T. *Devices for Gas Illuminations.*
Lond. 1886. 8vo.
- *The Gas Manager abroad—Brazil. Tract. 8vo. vol.*
(From the "Gas World.") Lond. 1894. 8vo.
- *The Gas Manager's Handbook: consisting of tables, rules and
useful information for Gas Engineers, etc. Lond. 1870. 8vo.*
- — 2nd edition. Lond. 1874. 8vo.
- — 3rd edition. Lond. 1883. 8vo.
- — 5th edition, enlarged. Lond. 1889. 8vo.
- *History of the Forest of Rossendale. 2nd edition.*
Rautenstall, 1893. 4to.
- *Inaugural Address of the President [of the Gas Institute] T.
Newbigging. Tract. 8vo. vol. 412.* Lond. 1885. 8vo.
- *Lancashire Characters and Places. Manchester, 1891. 8vo.*
- *Sketches and Tales. Lond. 1883. 8vo.*
- *The Valuation of Gas-works for Assessment. With an appendix
of decided cases. Lond. 1891. 8vo.*
- NEWBOTTLE COLLIERY, *Durham.* *Report on explosion on June
24th, 1885.* Lond. 1885. folio.
- NEWBURY AND BATH CANAL. *Sundry papers and plans
circulated by a company formed for the purpose of forming a water
communication between London and Bristol by means of a canal
from Newbury to Bath. Tract. 8vo. vol. 34.* 1790. 8vo.
- NEWCASTLE, N.S.W. *Harbour Improvements at Newcastle.
Report. Sydney, 1888. folio.*
- *Report on the Water Supply of Newcastle, Maitland, and Bat-
hurst. Sydney, 1877. folio.*

NEWCASTLE-UNDER-LYME JUNCTION CANAL. Act for making a Canal . . . from the Newcastle-under-Lyme Canal to the Canal of Sir N. B. Gresley near Newcastle-under-Lyme, etc.

Lond. 1798. folio.

NEWCASTLE-UPON-TYNE.—[*Bridges.*] Report of the Committee of the projected Suspension Bridge, read before the public meeting held at the Guildhall, Newcastle-upon-Tyne, on Saturday the 10th of September, 1825. *Tract.* 4to. vol. 13.

Newcastle-upon-Tyne, 1825. 4to.

—[*Public Libraries.*] Catalogue of the books in the Juvenile Lending Department . . . Compiled . . . by W. J. Haggerston. New edition.

Lond. 1887. 8vo.

— Supplementary Catalogue of Books added to the Lending Department. Compiled . . . by W. J. Haggerston.

Lond. 1887. 8vo.

— First (second, etc.) Annual Report of the Committee.

Newcastle-upon-Tyne, 1881, etc. 8vo.

—[*Water Supply.*] An Act for better supplying with Water the Town and County of the Town of Newcastle-upon-Tyne, etc.

Lond. 1834. folio.

— An Act for better supplying with Water the Town . . . of Newcastle-upon-Tyne, and Borough of Gateshead, etc.

Lond. 1840. folio.

— History of the water supply of Newcastle-upon-Tyne. *Tract.* 8vo. vol. 110.

Newcastle-upon-Tyne, 1851. 8vo.

NEWCASTLE AND CARLISLE RAILWAY. Newcastle and Carlisle intended Railroad. Report of the directors. *Tract.* 8vo. vol. 47.

[1825.] 8vo.

NEWCASTLE AND MARYPORT CANAL. Considerations of the probable Commerce and Revenue that may arise on the proposed canal between Newcastle and Maryport. *Tract.* 8vo. vol. 47.

Newcastle, 1796. 8vo.

— — New edition. *Tract.* 8vo. vol. 6. *Newcastle*, 1802. 8vo.

— — New edition. *Tract.* 8vo. vol. 6. *Carlisle*, 1807. 8vo.

NEWCOMB, S. Investigations of Corrections to Hansen's Tables of the Moon : with tables for their application. *Tract.* 4to. vol. 80.

Washington, 1876. 4to.

NEWDIGATE, A. L. Scales for the ready comparison of British and Metric Weights and Measures. [*Lond.* 1886.]

NEWELL, F. H. The Arid Regions of the United States. *Tract.* 8vo. vol. 535.

Chicago, 1893. 8vo.

— Hydrography of the Arid Regions. Extract from the 12th annual report of the Director of the U.S. Geological Survey.

Washington, 1892. 4to.

— Water Supply for Irrigation. [*U.S. Geol. Survey.*]

Washington, 1894. folio.

- NEWENHAM, W. P., and FULLER, R. "Nelson" Steamer, being a rough trial and comparison between the old and new paddle floats and wheels, . . . at the measured knot at Long Reach, between the 28th of July and the 18th of August, 1845. *Tract.* 4to. vol. 38. *Lond.* 1845. 4to.
- NEWFOUNDLAND. Two Reports on the Newfoundland Trade. 1793. *Lond.* 1801. folio.
- NEWHAVEN. A collection of reports relative to the harbour and piers of Newhaven. *Tract.* 8vo. vol. 230. *Lewes*, 1846. 8vo.
- NEWLANDS, B. E. R. Sugar : a handbook for Planters, *etc.* 1888. See LOCK, C. G. W., NEWLANDS, B. E. R., and NEWLANDS, J. A. R.
- NEWLANDS, J. The Carpenter and Joiner's Assistant, *etc.* *Glasgow*, 1869. 4to.
- — [Another edition.] *Lond.* 1880. 4to.
- Report on Horse Railways. *Tract.* 8vo. vol. 138. *Liverpool*, 1860. 8vo.
- Report on the Establishment and present Condition of the public baths and wash-houses in Liverpool. *Tract.* 8vo. vol. 109. *Liverpool*, 1856. 8vo.
- Report . . . on the Liverpool Water-supply. 1849. See SIMPSON, J., and NEWLANDS, J.
- Report to the Health Committee of the Borough of Liverpool on the sewerage and other works under the Sanitary Act, 1848 (1851, 53, 56 and 1856-62). *Liverpool*, 1848-63. 8vo.
- NEWLANDS, J. A. R. On the Discovery of the Periodic Law and on Relations among the Atomic Weights. *Lond.* 1884. 8vo.
- Sugar : a handbook for Planters, *etc.* 1888. See LOCK, C. G. W., NEWLANDS, B. E. R., and NEWLANDS, J. A. R.
- NEWMAN, F. W. Evaluation of a definite Integral : and on Logarithmic Integrals of the Second order. *Tract.* 8vo. vol. 189. [Cambridge,] 1847. 8vo.
- The Theorems of Taylor and Maclaurin, in a finite form. *Tract.* 8vo. vol. 187. *Oxford*, 1830. 8vo.
- NEWMAN, J. Earthwork Slips and Subsidences upon Public Works : their causes, prevention, and reparation. *Lond.* 1890. 8vo.
- Iron Cylinder Bridge Piers. On the calculations and investigations necessary in designing them, with tables, *etc.* *Tract.* 8vo. vol. 258. *Lond.* 1875. 8vo.
- Notes on Concrete and Works in Concrete, *etc.* *Lond.* 1887. 8vo.
- — 2nd edition, enlarged. *Lond.* 1894. 8vo.

- NEWMAN, J.—*continued*. Notes on Cylinder Bridge Piers and the Well system of Foundations, *etc.* Lond. 1893. 8vo.
- NEWMARCH, C. H. Illustrations of the remains of Roman Art in Cirencester, *etc.* 1850. See BUCKMAN, J., and NEWMARCH, C. H.
- NEWPORT, *Mon.* Newport and Pillgwenlly Water Bill. Minutes of proceedings, evidence and speech taken before the Select Committee of the House of Lords. Lond. 1887. folio.
- Report of the Local Government Board. Lond. 1887. folio.
- Newport Improvement Bill. Minutes of evidence, proceedings, *etc.* Lond. 1876. folio.
- Report by the Board of Trade . . . on the Classification of Merchandise Traffic and schedule of maximum rates, determined in respect of the Alexandra (Newport and South Wales) Docks and Railway, *etc.* Lond. 1891. folio.
- NEWPORT PAGNELL. Act for making a navigable Canal from Newport Pagnell to the Grand Junction Canal at Great Linford, in the county of Buckingham. Lond. 1814. folio.
- NEWTON, *Mass.* Annual Report of the City Engineer for the year 1892, *etc.* Newton, 1893, *etc.* 8vo.
- NEWTON, A. V. . An Analysis of the Patent and Copyright Laws. Lond. 1884. 8vo.
- An Analysis of the Patents, Designs, and Trade Marks Act, 1883: with remarks on its working. Tract. 8vo. vol. 363. Lond. 1883. 8vo.
- The Operation of the Patent Laws, with suggestions for their better administration. Tract. 8vo. vol. 139. Lond. 1864. 8vo.
- The Present Aspect of the Currency Question. Tract. 8vo. vol. 145. Lond. 1864. 8vo.
- Renewal Fees on British Patents, *etc.* Tract. 8vo. vol. 484. Lond. 1888. 8vo.
- NEWTON, H. R. Intermittent Discharge and Continuous Overflow System of Sewering, *etc.* Tract. 8vo. vol. 483. [Lond. ?] 1887. 8vo.
- The Sewage Problem. Letters on house, local, and universal drainage by Continuous Overflow. (First series.) Tract. 8vo. vol. 483. Lond. 1888. 8vo.
- NEWTON, Sir I. Arithmetica Universalis; sive de compositione et resolutione arithmetica liber. Lugduni Batavorum, 1732. 4to.
- [Another edition.] Cum commentario Johannis Castillioniei. 2 vols. Amstelodami, 1761. 4to.
- The Method of Fluxions and Infinite Series, with its application to the Geometry of Curve Lines: translated from the Latin with annotations . . . by J. Colson. Lond. 1736. 4to.
- Philosophiæ naturalis principia mathematica. Editio tertia, *etc.* Londini, 1726. 4to.

- NEWTON, Sir I.—*continued*. Thirteen Letters to John Covel, D.D., from original manuscripts. *Tract*. 8vo. vol. 196. *Norwich*, 1848. 8vo.
- NEWTON, J. Report on the Sewage Utilization of the Borough of Preston. *Tract*. 4to. vol. 52. *Preston*, 1865. 4to.
- Report on the Sewerage and private Improvements executed during 1858, in the Borough of Preston, *etc*. *Tract*. 4to. vol. 41. *Preston*, 1859. 4to.
- NEWTON, W. A Display of Heraldry. *Lond*. 1846. 8vo.
- The Government of London. Speech . . . on the Municipal Government of the Metropolis. Friday, April 22, 1870. *Tract*. 8vo. vol. 478. *Lond*. 1870. 8vo.
- London in the olden time. Being a topographical and historical memoir of London, Westminster, and Southwark, accompanying a pictorial map of the city and its suburbs, as they existed in the reign of Henry VIII., *etc*. (Map to accompany the above.) *Lond*. 1855. folio.
- NEWTON, W. E. Specification of Improvements in Electric or Telegraphic Conductors. *Tract*. 4to. vol. 62. *Lond*. 1864. 4to.
- NEWTON, W. J. Borough of Accrington. Report on the Survey of the river Hyndburn and its tributaries, with particulars of the various polluting agencies. *Tract*. 8vo. vol. 516. *Accrington*, 1891. 8vo.
- Plan of the Borough of Accrington in the County of Lancaster. *Tract*. folio. vol. 45. *Accrington*, 1890. folio.
- NEYT, P. J. Sprokkelingen op waterboukundig gebied. *Zwolle*, 1885. 8vo.
- NIAGARA. Report adopted by the Oswego Board of Trade, February 16th, 1888, on the Niagara Ship Canal. *Tract*. 4to. vol. 111. *Oswego*, 1888. 4to.
- Seventh annual Report of the Commissioners of the State Reservation at Niagara, 1890. *Albany*, 1891. 8vo.
- NIAGARA FALLS POWER COMPANY. Annual Report . . . Charter and schedule of rates. June, 1891. *New York*, 1891. 4to.
- Niagara Falls Power Company to Central Trust Company of New York. [First mortgage.] *New York*, 1891. 4to.
- NIAUDET, A. Elementary Treatise on Electric Batteries. Translated, *etc*. *New York*, 1884. 8vo.
- Machines électriques à courants continus systèmes Gramme et Congenère. 2^{me} édition. *Tract*. 8vo. vol. 329. *Paris*, 1881. 8vo.
- Téléphones et phonographes. Étude complète de ces inventions. *Tract*. 8vo. vol. 295. *Paris*, [1878.] 8vo.
- NIBLETT, J. T. Portative Electricity: being a treatise on . . . portable secondary batteries, *etc*. *Lond*. [1893.] 8vo.

- NIBLETT, J. T.—*continued*. Secondary Batteries : a description of the modern apparatus for the storage of electrical energy. *Lond.* [1892.] 8vo.
- NICARAGUA. Canal of Nicaragua : or, a project to connect the Atlantic and Pacific oceans, *etc.* By N. L. B. *Tract.* 8vo. vol. 70. *Lond.* 1846. 8vo.
- Chart of the world, showing distances saved by the Nicaragua and Costa Rica Canal. *Tract.* . vol. . *New York,* [.]
- Contrato de transito interoceanico celebrado en 10 de noviembre de 1863 entre S. E. L. Molina, Ministro de Nicaragua en Washington y F. Morris, Presidente de la Compania Centro-Americana, *etc.* [In Spanish and English.] *Tract.* 8vo. vol. 441. *Managua,* 1864. 8vo.
- Convention pour l'exécution d'un canal maritime interocéanique sur le territoire de la Republique de Nicaragua. *Tract.* 8vo. vol. 441. *Paris,* 1869. 8vo.
- Description of route, estimated cost and business. *Tract.* 8vo. vol. 417. *Washington,* [1886.] 8vo.
- Nicaragua. [A pamphlet on the Canal Question.] *Tract.* 8vo. vol. 440. [Lond. 1852.] 8vo.
- Nicaragua and the Filibusters. *Tract.* 8vo. vol. 440. 1856. 8vo.
- [The Nicaragua Canal at the Paris Exposition of 1889.] *Tract.* 4to. vol. 111. [1889.] 4to.
- [Nicaragua Railway. Extracts from *The Times*, *Daily News*, *Globe*, and *Money Market Review*.] *Tract.* 8vo. vol. 439. *Lond.* 1866. 8vo.
- Profile of the Nicaragua Inter-oceanic Ship Canal. 1888. *Tract.* folio. vol. 42. *New York,* 1888. folio.
- Proposed convention between the Republic of Nicaragua and the Atlantic and Pacific Steam Navigation and Transit Company, Limited. *Tract.* 8vo. vol. 441. *Lond.* 1859. 8vo.
- Report of the Executive Committee to the members of the Provisional Society. *Tract.* 8vo. vol. 323. *Washington,* 1880. 8vo.
- Ship Canal between the Atlantic and Pacific Oceans. Report of British Engineers. *Tract.* 8vo. vol. 441. *Lond.* 1852. 8vo.
- State of the Great Ship-Canal Question. Convention between Great Britain and the United States. *Tract.* 8vo. vols. 440 and 441. [Lond. 1850.] 8vo.
- Terms of the Railway Concession concluded in 1865 between the Government of Nicaragua and Captain Bedford Pim. *Tract.* 8vo. vol. 440. *Lond.* 1866. 8vo.
- Tratado de amistad, comercio, y navegacion entre Nicaragua y S. M. B., *etc.* *Tract.* 8vo. vol. 439. [Managua?] 1860. 8vo

- NICARAGUA CANAL CONSTRUCTION CO. Report of the Board of Consulting Engineers. *Tract.* 8vo. vol. 494. 1889. 8vo.
- NICHOL, J. P. The Architecture of the Heavens. 9th edition. *Lond.* 1851. 8vo.
- NICHOLL, T. J. Improvement of Prairie Roads and Streets. *Tract.* 8vo. vol. 463. *Chicago*, 1878–79. 8vo.
- Useful Information and Data for travellers, railway men and mechanics. 2nd edition. *Chicago*, 1892. 12mo.
- NICHOLLS, G., *Capt.* English and British Channels Ship Canal. Report to the Committee of Management. *Tract.* 8vo. vol. 5. *Lond.* 1825. 8vo.
- Reports on a Ship Canal for the Junction of the English and Bristol Channels. 1824, 41. See TELFORD, T., and NICHOLLS, G.
- NICHOLS, W. R. The Filtration of Potable Water. *New York*, 1879. 8vo.
- Water Supply considered mainly from a chemical and sanitary standpoint. *New York*, 1883. 8vo.
- NICHOLSON, J. The Builder's Practical Guide: containing a complete explanation of the principles of science, as applied to every branch of building, *etc.* *Lond.* 1830. 8vo.
- The Operative Mechanic, and British Machinist; being a practical display of the manufactories and mechanical arts of the United Kingdom. With a supplement, relating to British public works and national improvements, translated from the French of Baron C. Dupin, *etc.*, by C. Taylor. 3rd edition. *Lond.* 1830. 8vo.
- NICHOLSON, P. Analytical and Arithmetical Essays; consisting of continued fractions, factorials and figurate numbers, extraction of roots, *etc.* *Lond.* 1821. 8vo.
- An Architectural and Engineering Dictionary, *etc.* 2 vols. *Lond.* 1835. 4to.
- — New edition. Edited by E. Lomax and T. Gunyon. 2 vols. *Lond.* [1854.] 4to.
- The Carpenter's new Guide: being a complete book of lines for carpentry and joinery; treating fully on practical geometry, soffits, brick and plaister groins, niches of every description . . . 3rd edition. *Lond.* 1801. 4to.
- Essay on Involution and Evolution; containing a method of ascertaining the numerical value of any function of an unknown quantity; particularly applied to the operation of extracting the roots of equations, pure or adfected, *etc.* *Tract.* 8vo. vol. 19. *Lond.* 1820. 8vo.
- Essays on the Combinatorial Analysis; showing its application to some of the most useful and interesting problems of algebra; such as the expansion of a multinomial according to any given exponent, *etc.* *Tract.* 8vo. vol. 30. *Lond.* 1818. 8vo.

NICHOLSON, P.—*continued*. The Guide to Railway Masonry, containing a complete treatise on the oblique arch in four parts. With an Appendix. Edited by R. Cowen. 3rd edition.

Lond. and Carlisle, 1846. 8vo.

— Mechanical Exercises ; or, the elements and practice of carpentry, joinery, bricklaying, masonry, slating, *etc.* *Lond.* 1812. 8vo.

— The new and improved Practical Builder, and Workman's Companion . . . Revised and arranged by Thomas Tredgold. 3 vols. *Lond.* [1837.] 4to.

— The Principles of Architecture, containing the fundamental rules of the art, in geometry, arithmetic, and mensuration . . . 4th edition. 3 vols. *Lond.* 1836. 8vo.

— The Rudiments of Practical Perspective, in which the representation of objects is described by two easy methods, *etc.*

Lond. 1822. 8vo.

— The Student's Instructor in Drawing and Working the five orders of architecture. 7th edition. *Lond.* 1839. 8vo.

— — New edition. *Lond.* 1845. 8vo.

— A treatise on Projection, containing the first principles of plans and elevations, and the modes of delineating solids, and every form of mechanical construction, *etc.* *Lond.* 1837. 8vo.

— A Treatise on the Construction of Staircases and Hand-rails. 2nd edition. *Lond.* 1835. 4to.

NICHOLSON, R., and HAWTHORN, R. and W. Experiments upon the Newcastle-upon-Tyne and North Shields Railway, of two locomotive engines, the "Collingwood" and "Exmouth," as to the consumption of coke and water. *Tract.* 4to. vol. 37.

Newcastle, 1840. 4to.

NICHOLSON, S. Districts of Shanagolden, in the Barony of Shanid and County of Limerick. Report . . . on the proposed Drainage of the flooded and injured lands in the above District.

Dublin, 1846. 8vo.

— Doohulla District. Report . . . on the Drainage and reclamation of the mountain lands in the above District ; with suggestions for the improvement of the river and lakes connected therewith. *Dublin*, 1846. 8vo.

NICHOLSON, W. Journal of Natural Philosophy, *etc.* 1802, *etc.* See PERIODICAL PUBLICATIONS.

— New . . . Dictionary of the German Language, *etc.* 1805, *etc.* See KÜTTNER, C. G., and NICHOLSON, W.

NICOLAJ, N. M. De' bonificamenti delle terre Pontine libri IV. Opera storica, critica, legale, economica, *etc.* *Roma*, 1800. folio.

NICOLI, N. Relazione sui sistemi di ferrovie a dentiera, *etc.* 1892. See ARTOM DI S. AGNESE, E., and NICOLI, N.

NICOLL, D. Cloacina ; a treatise on the Utilization of Town Refuse. *Tract.* 8vo. vol. 372. *Lond.* 1884. 8vo.

- NICOLL, D.—*continued*. Health and its appliances. *Lond.* 1885. 4to.
- A lecture on Sewage Utilization, the Abolition of Sewer-Gas, and Purification of Rivers. *Tract.* 8vo. vol. 418. *Lond.* [1886?] 4to.
- The Telegraph and Telephone, considered in relation to Economy and Efficiency. *Tract.* 8vo. vol. 446. *Lond.* 1887. 8vo.
- Underground versus Overhead Wires. *Lond.* 1887. 8vo.
- NICOLLS, W. J. The Railway Builder. A handbook for estimating the probable cost of American Railway construction and equipment. *Philadelphia*, 1878. 12mo.
- NILE, *River*. Copies or Extracts of Captain Spratt's Reports on the Delta of the Nile and on the true position of Pebusium and Farama. *Lond.* 1860. folio.
- [Reports on the] Nile Flood, 1892. *Cairo*, 1893. 4to.
- NILSSON, L. G., WIDMARK, P. T., and COLLIN, A. Z. *Engelsk-Svensk ordbok*. *Stockholm*, 1875. 8vo.
- NIMMO, A. New Piloting Directions for St. George's Channel and the coast of Ireland. *Tract.* 8vo. vol. 374. *Dublin*, 1832. 8vo.
- Report on the Improvement of the Harbour of Drogheda; and an estimate for the improvement of the river of Drogheda. *Tract.* 8vo. vol. 13. *Drogheda*, 1826. 8vo.
- Report on the means of improving the River and Harbour of Cork. *Tract.* 4to. vol. 34. *Cork*, 1815. 4to.
- Report on the proposed Railway between Limerick and Waterford. *Tract.* 8vo. vol. 2. *Dublin*, 1825. 8vo.
- NIMMO, A., KILLALLY, J., and OWEN, J. Reports made to the Harbour Commissioners on the state and capabilities of the River and Harbour of Cork. *Tract.* 8vo. vol. 305. *Cork*, 1845. 8vo.
- NIMMO, J. The Railroad Problem. Cost of transportation, Railroad confederations or Pooling arrangements, and the Governmental regulation of Railroads, etc. *Tract.* 8vo. vol. 347. *Washington*, 1881. 8vo.
- NIPHER, F. E. Theory of Magnetic Measurements, with an appendix on the Method of Least Squares. *New York*, 1887. 8vo.
- NISH, A. G. Report on the further Deepening between Quebec and Montreal. *Tract.* 8vo. vol. 277. *Montreal*, 1872. 8vo.
- NIVOIT, E. *Géologie appliquée à l'art de l'ingénieur*. 2 vols. *Paris*, 1887–89. 8vo.
- NOACK-DOLLFUS, H. *Essais de compteurs à eau*. *Tract.* 8vo. vol. 469. *Mulhouse*, 1883. 8vo.
- NOAD, H. M. Chemical Manipulation and Analysis qualitative and quantitative. New edition. *Montreal*, 1852. 8vo.

- NOAD, H. M.—*continued*. A Manual of Electricity : including Galvanism, Magnetism, Diamagnetism, Electro-Dynamics, Magneto-Electricity, and the Electric Telegraph. 2 vols.
Lond. 1855–57. 8vo.
- — 4th edition. *Lond.* 1859. 8vo.
- The Student's Textbook of Electricity. *Lond.* 1867. 8vo.
- — New edition . . . revised, with an introduction by W. H. Preece. *Lond.* 1879. 8vo.
- NOBEL'S EXPLOSIVES CO. [Report on Explosions at the Factory at Redding.] *See* REDDING.
- NOBILI, L. Sul confronto dei circuiti elettrici coi circuiti magnetici e sul calore intestino della terra. *Tract.* 8vo. vol. 312.
Modena, 1838. 8vo.
- NOBLE, Sir A., and ABEL, Sir F. A. Researches on Explosives. Fired gunpowder. *Tract.* 4to. vol. 74. *Lond.* 1875. 8vo.
- NOBLE, J. The professional Practice of Architects, and that of measuring surveyors, and reference to builders, &c. &c., from the time of the celebrated Earl of Burlington. *Lond.* 1836. 8vo.
- NOBLE, W. H., Lt.-Col. R.A. Lectures on the Penetration of iron Armour-plates by steel shot, *etc.* *Chatham*, 1867. folio.
- Report on various Experiments carried out under the direction of the Ordnance Select Committee relative to the penetration of iron armour plates by steel shot, *etc.* *Tract.* folio. vol. 9.
Lond. 1866. folio.
- Useful Rules and Tables. *Lond.* 1882. 12mo.
- NOËL, —. Recherche sur la construction et la meilleure disposition des digues, pour les rendre capables de résister aux efforts de la mer. *Caen*, 1781. 8vo.
- NOEL, G. H. U. The Gun, Ram and Torpedo. Manceuvres and tactics of a naval battle in the present day. *Lond.* 1874. 8vo.
- NOIZET-SAINT-PAUL, G. Traité complet de fortification . . . 2^e édition. 2 vols. *Paris*, 1806. 8vo.
- NOONAN, P. The Requisites of Smooth Track, *etc.* *Tract.* 8vo. vol. 532. [*Chicago?* 1893.] 8vo.
- NORDEN, J. [Maps of the six Home Counties. Described by John Norden and augmented by I. Speede, circa 1600. Reprinted and published by Kelly and Co.] *Lond.* 1878? 4to.
- NORDENAU, O. B. VON. *See* BECK VON NORDENAU, O.
- NORDENFELT, T. The Nordenfelt Machine Guns described in detail and compared with other systems, *etc.* *Portsmouth*, 1884. 4to.
- Notes on Iron Ore Deposits at Næverhaugen . . . Norway. *Tract.* 8vo. vol. 273. [*Lond.* 1876.] 8vo.
- NORDENSTRÖM, G. Note sur un creusement de puits à l'aide de plongeurs. *Tract.* 8vo. vol. 535. [*Liège*, 1893.] 8vo.

- NÖRDLING, W. von. Die Alternativ-Trassen der Arlberg-Bahn. *Tract. 8vo. vol. 303.* Wien, 1879. 8vo.
- Ansprache . . . über Einführung des metrischen Mass- und Gewichtsystems in Deutschland. *Tract. 8vo. vol. 202.* Stuttgart, 1858. 8vo.
- Die Bosnabahn. *Tract. 4to. vol. 89.* Wiesbaden, 1882. 4to.
- Compagnie du chemin de fer d'Orleans. Réseau central. Compte rendu statistique de la construction de la ligne de Bourges à Montluçon, de Montluçon à Moulins, de Montluçon à Limoges et de l'embranchement d'Aubusson jusqu'à Fournaux. *Tract. 4to. vol. 75.* (Lithographed.) Paris, 1866. 4to.
- Documents relatifs aux viaducs métalliques de la ligne de Commentry à Gannal. *Tract. 8vo. vol. 197.* Paris, 1870. 8vo.
- Étude sur le chemin de fer métropolitain de Paris. *Tract. folio. vol. 42.* Paris, 1887. folio.
- Die Fortsetzung der k. k. Bosnabahn von Sarajevo an's Meer. *Tract. 8vo. vol. 356.* Wien, 1883. 8vo.
- Mémoire sur les conditions de la transformation des chemins de fer à une voie en chemins à deux voies. *Tract. 8vo. vol. 207.* Paris, 1862. 8vo.
- Mémoire sur les piles en charpente métallique des grands viaducs. Paris, 1864. 8vo.
- Note sur l'écartement des alimentations sur les chemins de fer. *Tract. 8vo. vol. 207.* Paris, 1865. 8vo.
- Note sur le raccordement des déclivités et des courbes des voies de fer. *Tract. 8vo. vol. 179.* Paris, 1867. 8vo.
- Note sur les moyens de prévenir les amoncellements de neige sur les chemins de fer. Paris, 1865. 8vo.
- Note sur les ponts biais et les ponts courbes. *Tract. 8vo. vol. 183.* Paris, 1869. 8vo.
- Die Selbstkosten des Eisenbahn-Transportes und die Wasserstrassen-Frage in Frankreich, Preussen und Oesterreich. Wien, 1885. 8vo.
- Stimmen über schmalspurige Eisenbahnen. *Tract. folio. vol. 13.* Wien, 1871. folio.
- Ueber das technische Schul- und Vereinswesen Frankreichs. *Tract. 8vo. vol. 333.* Wien, 1881. 8vo.
- L'unification des heures, etc. *Tract. 8vo. vol. 497.* Paris, 1890. 8vo.
- Vorschläge zu einem allgemeinen deutschen Münz-, Maass- und Gewichtsystem. *Tract. 8vo. vol. 202.* 1848. 8vo.
- Die Zukunft des metrischen Systems und die Deutsche Münz-, Maass- und Gewichts-Einigung. *Tract. 8vo. vol. 202.* Stuttgart, 1860. 8vo.

NÖRDLING, W. von, and OTHERS. Die Arlbergbahn und die Frage der Stellung der Techniker im staatlichen und socialen Leben, etc. *Tract. 8vo. vol. 303.* Wien, 1880. 8vo.

NÖRDLINGER, W. *See* NÖRDLING, W. von.

NORFOLK, *Virginia*. [Form of contract and specifications for the construction of Norfolk Water Works.] *Tract. 8vo. vol. 204.* [Norfolk, Va., 1871.] 8vo.

NORFOLK ESTUARY. Act for enclosing and reclaiming from the sea certain tracts of land forming part of the Great Estuary called "The Wash," between the counties of Norfolk and Lincoln. [Norfolk Estuary Act, 1846.] *Lond. 1846. folio.*

— A bill to amend the Norfolk Estuary Act, 1846, and to enable the Eau Brink Commissioners and the Corporation of King's Lynn to contribute towards the undertaking, etc. *Lond. 1849. folio.*

— [A Collection of Papers and Maps, some in MS., relating to Norfolk Estuary and the Norfolk Estuary Bill.] *[Lond. 1846-50.] folio.*

— Minutes of Evidence before the Select Committee of the House of Lords on the Norfolk Estuary Bill. *Lond. 1877. folio.*
(Incomplete.)

— Minutes of Evidence before the Select Committee [of the House of Commons]. *Lond. 1849. folio.*

— Norfolk Estuary Bill. Report of Capt. J. Vetch, R.E., and Capt. J. Washington, R.N., the inspectors appointed to make a Local Inquiry, etc. [With minutes of the evidence given at the inquiry.] *Lond. 1849. folio.*

— Norfolk Estuary Amendment Bill. Report of the Admiralty. *Lond. 1849. folio.*

— Proceedings at the seventh half-yearly ordinary meeting of the company of proprietors, etc. *Lond. 1850. 12mo*

— Proceedings in Parliament in matters in dispute between the Norfolk Estuary Company and the Eau Brink Drainage Commissioners, relating to the mode of executing a cut and works below Lynn, under the Norfolk Estuary Acts. *Lond. 1853. 8vo.*

— Proceedings in the Court of Chancery, and before the Standing Orders Committee of the House of Commons, in matters in dispute between the Eau Brink Drainage Commissioners and the Norfolk Estuary Company, relating to the mode of executing a cut and works below Lynn, under the Norfolk Estuary Acts. *Lond 1852. 8vo.*

NORIE, J. W. A complete Epitome of Practical Navigation. 12th . . . edition. *Lond. 1839. 8vo.*

— — 15th edition. *Lond. 1852. 8vo.*

— A complete Set of Nautical Tables. 8th edition. *Lond. 1836. 8vo.*

NORMAL SCHOOL OF SCIENCE AND ROYAL SCHOOL OF MINES. Prospectus for 1886–91. *Lond.* 1886–90. 8vo.

NORMAN, *River*. Survey of Norman River, Gulf of Carpentaria. *Brisbane*, 1885. folio.

NORMAN, J. H. Adequate Available Gold Reserves for the British Isles. *Tract.* 8vo. vol. . *Lond.* 1891. 8vo.

— Description of Show Cases illustrative of the working of the Foreign and Colonial Exchanges of Gold and Silver. *Tract.* 8vo. vol. 513. *Lond.* [1891?] 8vo.

— Silver and Gold Coinage of England from the Conquest to the present time, *etc.* *Tract.* 8vo. vol. 513. *Lond.* 1890. 8vo.

NORMAND, C. Le Vignole des ouvriers. Ou méthode facile pour tracer les cinq ordres d'architecture . . . 2^e édition. *Paris*, 1824. 4to.

NORRINGTON, J. P. Report on the Main Roads in the Parish of Fulham. *Lond.* 1889. 8vo.

— The Use of the Western Australia woods, *karri* and *jarrah*, for Wood Paving. *Tract.* 8vo. vol. 507. [*Lond.* 1893.] 8vo.

NORTH, E. P. The Construction and Maintenance of Roads. *Tract.* 8vo. vol. 463. *New York*, 1879. 8vo.

— Notes on the relations between Railroads and Waterways in the United States. [5th Int. Congr. Int. Nav.] [*Paris*, 1892.] 8vo.

NORTH, S. N. D. History and present condition of the Newspaper and Periodical Press of the United States, with a catalogue of the publications of the Census year. [U.S.A. 10th Census. Vol. VIII.] *Washington*, 1884. 4to.

NORTH BRITISH ASSOCIATION OF GAS MANAGERS. Report of Proceedings, 1867 (1868–82, 90, 91). 1867–91. 8vo. (1870 and 1876 wanting.)

— Statistical Report on the Gas Supply of Scotland, 31st July, 1890, to 1st August, 1891, *etc.* *Tract.* 8vo. vol. 519. *Edinburgh*, 1892. 8vo.

NORTH BRITISH RAILWAY. Report by the Board of Trade . . . on the Classification of Merchandise Traffic and Schedule of Maximum Rates. *Lond.* 1891. folio.

NORTH EAST COAST INSTITUTION OF ENGINEERS AND SHIPBUILDERS. Report of the Council on the Horse Power of Marine Engines. *Tract.* 8vo. vol. 458. *Newcastle-upon-Tyne*, 1888. 8vo.

— Transactions. *Newcastle-upon-Tyne*, 1885, *etc.* 8vo.

NORTH EASTERN RAILWAY. Report by the Board of Trade . . . on the Classification of Merchandise Traffic and schedule of maximum rates, *etc.* *Lond.* 1891. folio.

NORTH KENT RAILWAY. Minutes of Evidence given before the Select Committee on Railway Bills . . . on the North Kent Lines, by the South-Eastern, North Kent (Vignoles') and London and Croydon Railway Companies. *Lond.* 1845. folio.

NORTH LEVEL. *See* BEDFORD LEVEL.

NORTH OF ENGLAND INSTITUTE OF MINING AND MECHANICAL ENGINEERS. Transactions. Vol. 1, etc.

Newcastle-on-Tyne, 1854, etc. 8vo.
(Vol. 1, 2nd edition.)

— An Account of the Strata of Northumberland and Durham as proved by Borings and Sinkings.

Newcastle-upon-Tyne, 1881, etc. 8vo.

— Rapport de la Commission des ventilateurs mécaniques . . . Tra-
duit par D. Murgue. *Tract.* 8vo. vol. 391. 1884. 8vo.

— Report of the (French) Commission on the use of Explosives in
the presence of Fire-damp in Mines: translated by W. J. Bird
and M. W. Brown. *Newcastle-upon-Tyne*, 1890. 8vo.

— Report of the Committee appointed to enquire into the Explosion
of an Air Receiver at Ryhope Colliery. *Tract.* 8vo. vol. 479.

Newcastle-upon-Tyne, 1888. 8vo.

**NORTH OF ENGLAND INSTITUTION OF COLLIERY ENGI-
NEERS.** Transactions. Vol. I.—III.

Newcastle-upon-Tyne, 1876–78. 8vo.

NORTH SEA. The North Sea Pilot. 3 vols. *Lond.* 1857–58. 8vo.

Pt. 1. Shetland and Orkney.

2. North and east coasts of Scotland.

3. East coast of England.

NORTH SHIELDS. A Statement of the circumstances attending
the letting of the Ballast Quay at the Lime Kiln Shore, North
Shields, by the Corporation of Newcastle, to Thomas Smith,
Thomas Smith the younger, and William Smith. *Tract.* folio.
vol. 38. *Newcastle-upon-Tyne*, 1886. folio.

NORTH SHORE RAILWAY. North Shore Railway between
Quebec and Montreal. Supplementary Report of the Quebec
Corporation Engineer. *Tract.* 8vo. vol. 470. *Quebec*, 1875. 8vo.

**NORTH STAFFORDSHIRE INSTITUTE OF MINING AND
MECHANICAL ENGINEERS.** Transactions. Vol. I., etc.

Newcastle, 1874, etc. 8vo.

(Vols. 1 and 2 incomplete.)

NORTH STAFFORDSHIRE RAILWAY. [Half-yearly] Report of
the Directors and Statement of Accounts.

Hanley, 1884–87. folio.

— Report by the Board of Trade . . . on the Classification of
Merchandise Traffic and Schedule of Maximum Rates.

Lond. 1891. folio.

— Report of an inquiry into the causes of an accident which
occurred near Harecastle Station. *Lond.* 1889. folio.

- NORTH WALSHAM AND DILHAM CANAL.** Act for making a navigable canal from the rivers Ant and Bure at or near Wayford Bridge near Dilham, to the towns of North Walsham and Antingham, in the county of Norfolk. *Lond.* 1812. folio.
- NORTH WILTS CANAL.** Act for making and maintaining a navigable canal from the Wiltshire and Berkshire Canal, in the parish of Swindon . . . to communicate with the Thames and Severn Canal in the parish of Latton, etc. *Lond.* 1813. folio.
- NORTHAMPTON,** *Marquess of* [SPENCER JOSHUA ALWYNE]. Address read at the Anniversary Meeting of the Royal Society . . . 1839 (1846). *Tract. 8vo. vol. 97.* *Lond.* 1839, 47. 8vo.
- NORTHCOTT, W. H.** The Theory and Action of the Steam engine. *Lond.* 1876. 8vo.
- A Treatise on Lathes and Turning, simple, mechanical and ornamental. *Lond.* 1876. 8vo.
- NORTHERN AND EASTERN RAILWAY COMPANY.** Prospectus. *Tract. folio. vol. 49.* *Lond.* 1835. folio.
- Report to the proprietors at their first general meeting. *Tract. 8vo. vol. 228.* *Lond.* 1836. 8vo.
- NORTHERN PACIFIC RAILROAD.** Memorial of the Board of Direction of the company. Communications from Lieut.-Gen. Grant . . . and report of the engineer-in-chief. *Tract. 8vo. vol. 170.* *Hartford,* 1867. 8vo.
- The Northern Pacific Railroad. By a Member of the Chicago Press. *Tract. 8vo. vol. 462.* *New York,* 1882. 8vo.
- [Prospectus for emigrants.] *Tract. 8vo. vol. 462.* *Liverpool,* [1882.]
- Specifications for the substructure and superstructure of the Bismarck Bridge. [2 pamphlets.] *Tract. folio. vol. 44.* [New York, 1883?] folio.
- Statement of its resources and merits, as presented to the Pacific Railroad Committee of Congress, H. R. *Tract. 8vo. vol. 170.* *Washington,* 1868. 8vo.
- NORTHFLEET.** Naval considerations upon the letters of Lord Melville and Mr. Rose, relative to the Construction of a Naval Arsenal at Northfleet. *Tract. 8vo. vol. 75.* *Lond.* 1810. 8vo.
- "Wet and dry," or, the docks of London; being an inquiry concerning the (proposed) Northfleet Docks. By "Capel Court." *Tract. 8vo. vol. 102.* *Lond.* 1859. 8vo.
- NORTHUMBERLAND,** *Duke of* [ALGERNON PERCY]. Report of the committee appointed to examine the lifeboat models submitted to compete for the premium offered by the Duke of Northumberland; to which is added, a list of the existing lifeboat, rocket, and mortar stations, and an abstract of the wrecks which occurred on the shores of the British Isles in 1850. Appendix. *Lond.* 1851. folio.

- NORTON, C. B. American Inventions and Improvements in Breech-Loading Small Arms, Heavy Ordnance, *etc.* *Springfield*, 1880. 4to.
- NORTON, J. L. [Description of] Norton's Patent Tube Well. *Tract.* 8vo. vol. 161. [Lond.] 1867. 8vo.
- NORTON VENTILATOR COMPANY. The Norton House and Ship Ventilator. Designed for the Ventilation of Houses, Ships, Tunnels, and Mines. *Tract. folio. vol. 42.* [Lond. 1882?] folio.
- NORWAY.—[*Harbours.*] Planer og Projecter for Havnearbeider i Norges Fiskeridistrikter. *Christiania*, 1877–80. 8vo.
- [Railways.] Angaaende Gudbrandsdal Romsdals Banen. *Christiania*, 1878. 8vo.
- Angaaende Valget af Sporvidde for Jernbaneanlægget mellem Eidsvold og Hamar. *Christiania*, 1878. 8vo.
- Norges Officielle Statistik. De Offentlige Jernbaner, 1877 (–1886). *Christiania*, 1878–87. 4to and 8vo.
- Referat af Diskussioner angaaende de norske Jernbaners Sporvidde. *Christiania*, 1878. 8vo.
- NORWICH. An Act for Supplying the City of Norwich . . . with Water. *Lond.* 1850. folio.
- Report on an Explosion of Fireworks at Norwich. *Lond.* 1876. folio.
- NORWICH AND LOWESTOFT CANAL. Minutes of Evidence taken before the Committee on the bill for making and maintaining a navigable communication for ships and other vessels between the city of Norwich and the sea, at or near Lowestoft, *etc.* *Lond.* 1826. folio.
- [Abstract of the foregoing.] *Tract.* 8vo. vol. 5. *Norwich*, 1826. 8vo.
- NORWICH UNION FIRE INSURANCE SOCIETY. Norwich Union Fire Insurance Society's Act, 1879. *Lond.* 1879. folio.
- NORWOOD.—*Lambeth Parish Half-Time School.* Royal visit [of the Crown Princess of Germany. Containing an explanation of the character of the Institution, by Sir Edwin Chadwick]. *Tract.* 8vo. vol. 452. (From "Sanitary Engineering.") *Lond.* 1887. 8vo.
- NORWOOD, *South.* Report on an explosion in Messrs. Brock and Co's Firework Factory at South Norwood, on 24th May, by Maj. Majendie. *Lond.* 1881. folio.
- Report . . . on an Explosion at C. T. Brock and Co's Firework Factory, on the 13th March, 1893: by Col. V. D. Majendie. *Lond.* 1893. folio.
- Report . . . on the . . . Explosion at C. T. Brock and Co's Firework Factory, South Norwood, . . . 19th August, 1893. *Lond.* 1893. folio.
- NORWOOD, M. System of Navigation. *Lond.* 1685. 8vo.

NOSEK, T. Ueber Regulirung von Gebirgsflüssen und Anlage von Thalsperren in Baiern und in der Schweiz. *Brunn*, 1881. folio.

NOTTINGHAM. The Meteorology of Nottingham for the year 1891. [Observations by Arthur Brown and P. Boobbyer.] *[Nottingham, 1892.]* folio.

NOTTINGHAM—*continued*. Report on the Water undertaking, with the Report of the Engineer, M. O. Tarbotton. *Tract. 8vo. vol. 407.* 1885. 8vo.

— *University College*. Calendar. Session 1885–86 (1886–87, etc.). *Nottingham, 1885, etc.* 8vo.

— Ceremonial Opening of the New Technical Schools. *Tract. 4to. vol. 121.* 1893. 4to.

NOTTINGHAM, *County of*. Act (amended acts) for the more effectually embanking, draining . . . and improving certain low lands . . . in the several parishes or townships of Everton, Scaftworth, Gringley-on-the-Hill, Misterton and Walkeringham, in the county of Nottingham. *Lond.* 1796, 1801, 13. folio.

NOTTINGHAM CANAL. Act for making and maintaining a navigable canal from the Cromford Canal in the county of Nottingham, to or near to the town of Nottingham, and to the river Trent, etc. *Lond.* 1792. folio.

NOUERRE, FER DE LA. See FER DE LA NOUERRE.

NOUETTE-DELMORE, F. De la question des chemins de fer en France. *Tract. 8vo. vol. 300.* *Paris*, 1872. 8vo.

NOURSE, J. E. The Maritime Canal of Suez: brief memoir of the enterprise from its earliest date, etc. [*Suez Canal Tracts*, Vol. 2.] *Washington*, 1869. 8vo.

— The Maritime Canal of Suez from its inauguration in 1869 to the year 1884. *Washington*, 1884. 8vo.

— Memoir of the Founding and Progress of the United States Naval Observatory, etc. *Tract. 4to. vol. 115.* *Washington*, 1873. 4to.

NOVA SCOTIA.—[*Chamber of Commerce*.] Annual Report for 1877 (1879). *Tract. 8vo. vol. 398.* *Halifax*, 1878, 80. 8vo.

— [*Mines*.] Reports of the Chief Commissioner for 1865 and 1867. *Tract. 8vo. vol. 208.* *Halifax*, 1866–68. 8vo.

— Report of the Chief Gold Commissioner (S. Creelman) for the province of Nova-Scotia for the year 1862. *Tract. 8vo. vol. 136.* *Halifax, N.S.*, 1863. 8vo.

— Report of the Department of Mines for 1888. *Halifax, N.S.*, 1889. 8vo.

— Reports and testimonials relating to the Iron Mines of Nova Scotia. *Tract. 8vo. vol. 101.* *Lond.* 1856. 8vo.

— [*Railways*.] Report of the Chief Commissioner for 1862 (65). *Tract. 8vo. vols. 138 and 207.* *Halifax, N.S.*, 1862, 66. 8vo.

- NOVA SCOTIAN INSTITUTE OF NATURAL SCIENCE.
 Proceedings and Transactions. 1st series. Vol. vii., part 4, 1889–90. *Halifax, N.S.*, 1890. 8vo.
- 2nd series. Vol. 1, etc. *Halifax, N.S.*, 1891, etc. 8vo.
- NOVELLO, J. A. Improvements in Constructing Ships. *Tract.* 8vo. vol. 483. *Genova*, 1889. 8vo.
- NOVINCE, G. Rapport sur les appareils accessoires concernant la production et l'emploi de la vapeur à l'Exposition Universelle de 1889. *Tract.* 8vo. vol. 529. *Amiens*, 1892. 8vo.
- NURSEY, P. F. Inaugural Address delivered, as President of the Society of Engineers, etc. *Tract.* 8vo. vol. 476. *Lond.* 1886. 8vo.
- On Fuel. *Tract.* 8vo. vol. 423. *Lond.* 1865. 8vo.
- A Paper on Boiler Explosions. *Tract.* 8vo. vol. 423. *Lond.* 1863. 8vo.
- A Paper on English and Continental Inter-communication. *Tract.* 8vo. vol. 423. *Lond.* 1869. 8vo.
- A Paper on Fox's System of Solid-pressed Steel Waggon and Carriage Frames, etc. *Tract.* 8vo. vol. 491. [*Lond.*] 1889. 8vo.
- A Paper on Illumination by means of Compressed Gas. *Tract.* 8vo. vol. 423. *Lond.* 1881. 8vo.
- A Paper on Mechanical Puddling. *Tract.* 8vo. vol. 423. *Lond.* 1874. 8vo.
- A Paper on modern Bronze Alloys for Engineering Purposes. *Tract.* 8vo. vol. 423. *Lond.* 1884. 8vo.
- A Paper on recent Developments in High Explosives, etc. *Tract.* 8vo. vol. 495. [*Lond.*] 1889. 8vo.
- A Paper on Recent Improvements in Explosive Compounds, with adjourned Discussion. *Tract.* 8vo. vol. 423. *Lond.* 1871. 8vo.
- [Another edition.] *Tract.* 8vo. vol. 225. *Lond.* 1871. 8vo.
- A Paper on the Channel Railway. *Tract.* 8vo. vol. 423. *Lond.* 1876. 8vo.
- A Paper on the Economic Uses of Blast Furnace Slag. *Tract.* 8vo. vol. 423. *Lond.* 1873. 8vo.
- Pile-Driving Machines and Discussion. *Tract.* 8vo. vol. 423. *Middlesbrough*, 1886. 8vo.
- NUTBROOK CANAL. Act for making [the Nutbrook Canal]. *Lond.* 1793. folio.
- NUVOLI, R. Condotta d'acqua potabile in Torino, etc. *Tract.* 8vo. vol. 482. *Torino*, 1872. 8vo.
- NYBERG, A. Murs de quai dans des sols vaseux et peu résistants. 1^{re} partie. [In Russian.] *St. Pétersbourg*, 1893. 8vo.
- NYSTROM, J. W. Description of a Hydraulic Pontoon-dock. *Tract.* 8vo. vol. 125. *St. Petersburg*, 1859. 8vo.
- Informe al supremo gobierno del Perú sobre una expedición al interior de la república. *Tract.* 8vo. vol. 165. *Lima*, 1868. 8vo.

- NYSTROM, J. W.—*continued*. A new Treatise on Steam Engineering, physical properties of permanent Gases and of different kinds of Vapor. *New York*, 1876. 8vo.
- A new treatise on the elements of Mechanics, establishing strict precision in the meaning of dynamical terms, *etc.* *Philadelphia*, 1875. 8vo.
- On force of falling Bodies and Dynamics of matter, classified with precision to the meaning of dynamical terms. *Tract*. 8vo. vol. 240. *Philadelphia*, 1873. 8vo.
- On the dynamical Law of Horse-power of Steam-Boilers. *Tract*. 8vo. vol. 268. *Philadelphia*, 1875. 8vo.
- Pocket-book of Mechanics and Engineering. . . 10th edition. *Philadelphia*, 1870. 12mo.
- Principles of Dynamics. *Tract*. 8vo. vol. 240. *Philadelphia*, 1874. 8vo.
- Project for a Technological Institute and Museum of useful arts in Philadelphia. *Tract*. 8vo. vol. 267. *Philadelphia*, 1875. 8vo.
- Project of a new System of Arithmetic, Weight, Measure and Coins, proposed to be called the Tonal System, with sixteen to the base. *Philadelphia*, 1862. 8vo.
- A treatise on Parabolic Construction of Ships, and other marine engineering subjects. *Philadelphia*, 1863. 8vo.
- A treatise on Screw Propellers and their Steam Engines. *Philadelphia*, 1852. 8vo.
- NYSTRÖMER, C. Obras de salubridad de la ciudad de Mendoza, provision de agua, cloacas, *etc.* *Tract*. 8vo. vol. 482. *Buenos Aires*, 1888. 8vo.

O.

- OAKES, J., CLOWES, W. L., and BENT, T.** Report on the proposed Pauper Lunatic Asylum, for the county of Derby, *etc.* *Tract.* 8vo. vol. 63. *Derby*, 1844. 8vo.
- OAKES, W. H., Lieut.-Col.** Table of the Reciprocals of numbers from 1 to 100,000; with their differences, by which the reciprocals of numbers may be obtained up to 10,000,000. *Lond.* 1865. 8vo.
- OAKHAM CANAL.** Act for making and maintaining a navigable Cut or Canal from the Melton Mowbray Navigation in the county of Leicester to Oakham in the county of Rutland. *Lond.* 1793. folio.
- OAKS, V., and DODSON, T.** On the manufacture of Raw Sugar by Evaporation in vacuo, and curing by the pneumatic process. *Tract.* 8vo. vol. 57. *Lond.* 1834. 8vo.
- OAKS COLLIERY.** Report on the Explosion: by J. K. Blackwell and P. Dickinson. *Lond.* 1867. folio.
- Reports on the explosions in the Oaks and Talk o' th' Hill Colliery, by J. Dickinson and T. Wynne. *Lond.* 1867. folio.
- OBERLIN, J. J.** Jungendorum marium fluviorumque omnis ævi molimina. *Tract.* 4to. vol. 11. *Argentorati*, 1775. 4to.
- OBERSTADT, F.** Die Technologie der Eisenbahn-Werkstaetten, *etc.* (Atlas.) *Wiesbaden*, 1881. 4to.
- O'BRIEN, G.** A Treatise on Gold and Silver, to show a chief cause of present depression in trade, *etc.* *Tract.* 8vo. vol. 391. *Lond.* 1884. 8vo.
- OBSERVATORIO DO INFANTE DON LUIZ.** See LISBON.
- O'BYRNE, W. R.** A Naval Biographical Dictionary. *Lond.* 1849. 8vo.
- — Enlarged edition. *Lond.* 1861. folio.
- OCAGNE, M. d'.** Coordonnées parallèles et axiales. Méthode de transformation géométrique et procédé nouveau de calcul graphique déduits de la considération des coordonnées parallèles. *Paris*, 1885. 8vo.
- Nomographie. Les calculs usuels effectués au moyen des abaques. *Paris*, 1891. 8vo.
- O'CALLAGHAN, F. L.** Bidder's Earthwork Tables, intended and adapted for the use of the Public Works Department in India. *Roorkee*, [1865 ?] 8vo.

- OCKHART, J. F. *Geschichtliche Darstellung der frühern und spätern Gesezgebung, über Zölle und Handelsschiffahrt des Rheins, etc.* Mainz, 1818. 8vo.
- *Der Rhein, nach der Länge seines Laufs und der Beschaffenheit seines Strombettes, etc.* Mainz, 1816. 8vo.
- O'CONNELL, P. P. L., *Col. R.E.* *Mathematical Investigation of the form to which the surface of water flowing out at one end of a long rectangular trough of great width tends, of the velocity with which it issues, and of the volume discharged per second.* *Tract. folio. vol. 14.* Simla, 1871. folio.
- *Note on the Floods of the Indus River between its junction with the Sutlej above the towns of Mithankote and Chachor, and its passage through the gorge between Sukkur and Roree.* *Tract. folio. vol. 14.* Calcutta, 1871. folio.
- O'CONNOR, C. Y. *Report on the Improvement of Grades, Eastern Railway.* See WESTERN AUSTRALIA.—[*Railways.*]
- ODDY, J. J. *European Commerce, showing new and secure channels of trade with the continent of Europe . . . With a general view of the trade . . . of the United Kingdom of Great Britain and Ireland, etc.* Lond. 1805. 4to.
- *A Sketch for the improvement of the political, commercial, and local interests of Britain, as exemplified by the inland navigations of Europe in general, and of England in particular, etc.* *Tract. 8vo. vol. 9.* Lond. 1810. 8vo.
- ODLING, C. W. *Lecture on Irrigation Canals in Bengal.* *Tract. 8vo. vol. 514.* Calcutta, 1893. 8vo.
- ODLING, W. *Metropolis Water Inquiry, 1867. Tables of the general properties of the Water supplied by the Metropolitan Water Companies, etc. 1867.* See LETHBY, H., ODLING, W., and ABEL, Sir F. A.
- *Report on composition of water supplied to London, 1881, etc* See CROOKES, W., ODLING, W., and TIDY, C. M.
- *Report on the Effects of Sewage Contamination upon the River Thames.* *Tract. 8vo. vol. 516.* Lond. 1858. 8vo.
- O'DOHERTY, W. A. *Water for Domestic Use. Being a collection of the opinions and evidence of the leading scientific authorities of the day, etc.* *Tract. 8vo. vol. 133.* Lond. [1862.] 8vo.
- O'DRISCOLL, F. *Notes on the treatment of Gold Ores.* Lond. 1889. 8vo.
- OELWEIN, —, *Prof.* *Abkühlung des Wassers durch Anlage von Kühlschächten.* [1891?] folio.
- OERSTED, M. A. *Survey made for a Canal, through the River Sapoa, to the port of Salinas or Balaños in Costa Rica.* *Tract. 8vo. vol. 440.* Lond. 1851. 8vo.

- OESTERREICHISCHER INGENIEUR- UND ARCHITEKTEN-VEREIN.** Berichten des vom Österreichischen Ingenieur- und Architekten-Vereine eingesetzten Comités zur Aufstellung der Ergänzungen und Aenderungen an den bisherigen Typen für Walzeisen, *etc.* *Wien*, 1892. 4to.
- Bericht ueber den ersten Ingenieur- und Architekten-Tag abgehalten in *Wien* am 9 & 11 October, 1880. *Tract.* 8vo. vol. 333. *Wien*, 1881. 8vo.
- Bibliotheks-Katalog. *Tract.* 8vo. vol. 402. *Wien*, 1871. 8vo.
- Denkschrift zur Erinnerung an die 25-jaebrige Gründungsfeier, *etc.* *Tract.* folio. vol. 44. *Wien*, 1873. folio.
- Geschäftsordnung (genehmigt in der Monatsversammlung am 20 Jänner 1872). *Tract.* 8vo. vol. 472. [*Wien*, 1872.] 8vo.
- Statuten. *Tract.* 8vo. vol. 402. *Wien*, 1872. 8vo.
- Verhandlungen über die Wiener Verkehrsanlagen abgehalten im Oesterreichischen Ingenieur- und Architekten-Verein. *Tract.* 4to. vol. 120. *Wien*, 1891. 4to.
- Wochenschrift. 16 vols. *Wien*, 1876–91. folio.
- Zeitschrift. *Wien*, 1849, *etc.* 4to.
- OETTINGEN, A. VON.** Meteorologische Beobachtungen angestellt in Dorpat, 1866–70. *Dorpat*, 1871. 8vo.
- OEYNSHAUSEN, C. VON., DECHEN, H. VON., and LA ROCHE, H. VON.** Geognostische Umrissse der Rheinländer zwischen Basel und Mainz mit besonderer Rücksicht auf das Vorkommen des Steinsalzes. 2 vols. *Essen*, 1825. 8vo.
- O'FARRELL, J.** On the Construction and Use of the Six Sheets of Marginal Lines for Maps of every part of the world. *Tract.* 8vo. vol. 454. *Lond.* 1862. 8vo.
- OFFINGER, H.** English-French-Italian-German Technical Pocket Dictionary. 4 vols. *Stuttgart*, 1889–90. 8vo.
- OGAN, A.** Railway Collisions prevented. *Tract.* 8vo. vol. . *Lond.* 1855. 8vo.
- OGDENSBURG.** Annual Report upon the Improvement of Ogdensburg Harbor on the River Saint Lawrence; of Harbors on Lake Champlain, and of Grass and Triconderoga Rivers, New York, and of Otter Creek, Vermont, *etc.* *Tract.* 8vo. vol. . *Washington*, 1885. 8vo.
- Report of Dr. Peters . . . on the Longitude and Latitude of Ogdensburgh. *Tract.* 8vo. vol. 535. *Albany*, 1865. 8vo.
- OGILBY, J.** The Traveller's Guide : or, a most exact description of the roads of England and Wales, *etc.* *Lond.* 1712. 8vo.
- OGILVIE, J.** English Dictionary, explanatory, pronouncing, and etymological. *Lond.* 1867. 8vo.
- — [Another edition.] *Lond.* [1890?] 8vo.
2 F 2

- OGILVIE, J.—*continued*. The Imperial Dictionary of the English language. . . . New edition . . . edited by C. Annandale. 4 vols. *Lond.* [1891.] 8vo.
- The Student's English Dictionary, etymological, pronouncing, and explanatory, *etc.* *Lond.* 1865. 4to.
- O'GORMAN, D. Intuitive Calculations. 25th edition, enlarged by J. R. Young. *Lond.* 1879. 8vo.
- O'GORMAN, G. An Account of the Isthmus of Tehuantepec. *Tract.* 8vo. vol. 291. *Lond.* 1846. 8vo.
- OHIO. Geological Survey of Ohio. Report of Progress in 1870, by J. S. Newberry. *Columbus*, 1871. 8vo.
- OHIO AUXILIARY SOCIETY OF THE INTERNATIONAL INSTITUTE FOR PERFECTING WEIGHTS AND MEASURES. Proceedings. *Tract.* 8vo. vol. 403. *Cleveland*, 1881–82. 8vo.
- OHIO MECHANICS' INSTITUTE. Scientific Proceedings . . . Vol. 1, Nos. 3 and 4 (Vol. 2. Nos. 2 and 3). *Cincinnati*, 1883. 8vo.
- OHLSON, J. L. The British Sugar Industries and Foreign Export Bounties; a summary, *etc.* *Tract.* 8vo. vol. 332. *Lond.* [1880?] 8vo.
- OHM, G. S. Die galvanische Kette, mathematisch bearbeitet. *Berlin*, 1827. 8vo.
- Gesammelte Abhandlungen: herausgegeben und eingeleitet von Dr. E. Lommel, *etc.* *Leipzig*, 1892. 8vo.
- OHM, M. The spirit of Mathematical Analysis, and its relation to a logical system. Translated from the German. *Tract.* 8vo. vol. 189. *Lond.* 1843. 8vo.
- OHREN, M. Inaugural address by the President, British Association of Gas managers. *Tract.* 8vo. vol. 224. *Lond.* 1870. 8vo.
- On the Advantages of Gas for Cooking and Heating. *Tract.* 8vo. vol. 248. *Sydenham*, 1874. 8vo.
- OLANDER, E. A new Method of Graphic Statics applied in the construction of Wrought Iron Girders, practically illustrated by a series of working drawings of modern type, *etc.* Vol. 1. *Lond.* 1880. folio.
- OLDBURY. Minutes of proceedings and minutes of evidence on the Oldbury, Smethwick and West Bromwich Water Bill: also petition of the South Staffordshire Waterworks Company against the Bill. *Lond.* 1871. folio.
- Local Board. Particulars of Sewage Purification and Disposal in various towns. *Tract.* folio. vol. 46. *Oldbury*, 1890. folio.
- OLDHAM, *Lancs.* New Streets and Buildings Committee. Annual Report. [A. Foote, Borough Surveyor.] *Tract.* 8vo. vol. 351. *Oldham*, 1880. 8vo.

- OLDHAM, *Lancs.* — *continued.* Oldham Borough Improvements, Session 1880. Plans and Sections. *Manchester*, 1880. folio.
- Oldham Corporation Tramways. Session 1878. Plans and Sections. *Manchester*, 1878. folio.
- Surveyor's Report of the Works carried out under the direction of the Surveyor's Committee, from August, 1878, to March, 1880. [A. Foote, Borough Surveyor.] *Tract. 8vo. vol. 351.*
Oldham, 1880. 8vo.
- Report on the fall of the Oldham Cotton Mill and part of the prison at Northleach. *Lond.* 1845. folio.
- OLDHAM, J., *Civil Engineer*, and BOHN, E. Report on Driffeld Drainage. *Tract. 8vo. vol. 247.* *Hull*, 1874. 8vo.
- Specification of Works to be constructed in earthwork, concrete, brickwork, ironwork, and iron and earthenware pipes at Great Driffeld, Yorkshire, for the sewerage, *etc.* *Tract. folio. vol. 26.*
Hull, 1878. folio.
- Specification of Works to be constructed in earthwork, concrete, brickwork, ironwork, and iron and earthenware pipes at Patrington, Yorkshire, for the sewerage of Patrington. *Tract. folio. vol. 26.*
Hull, 1878. folio.
- OLDHAM, R. A. A few Words on the benefits of Irrigation in India. *Tract. folio. vol. 26.* [1878?] folio.
- OLDHAM, R. D. A manual of the Geology of India. . . . Stratigraphical and structural geology. 2nd edition revised, *etc.*
Calcutta, 1893. 8vo.
- OLDHAM, T. Geological Glossary for the use of students. *Tract. 8vo. vol. 379.* *Lond.* 1879. 8vo.
- OLIVE, W. T. Tables and Diagrams for curving Tramway Rails, and for making and laying in railway crossings.
Manchester, 1885. 8vo.
- OLIVER, A. The Fisheries of New South Wales. *Tract. 8vo. vol. 264.* *Sydney*, 1871. 8vo.
- OLIVER, E. E. Across the Border ; or, Pathân and Biloch.
Lond. 1890. 8vo.
- The Financial Aspects of Indian Irrigation. Direct and indirect returns. *Tract. 8vo. vol. 342.* *Calcutta*, 1881–82. 8vo.
- Report on Reh Swamp, and Drainage of the Western Jumna Canal Districts. *Tract. folio. vol. 29.* *Lahore*, 1881. 8vo.
- OLIVER, H., and AIREY, J. Handbook of all the Stations, Junctions, Sidings, Collieries, *etc.*, in the United Kingdom : showing the accommodation at each station, maximum crane power, county, railway on which situated and exact position. 5th edition.
Lond. 1877. 4to.
- — 7th edition. *Lond.* 1893. 8vo.

- OLIVER, J. A. W. *Astronomy for Amateurs, etc.* Lond. 1888. 8vo.
- OLIVER, S. P., *Lieut.* Description of two Routes through Nicaragua. *Tract.* 8vo. vol. 439. Gosport, 1867. 8vo.
- OLIVETTI, A. La locomotiva, etc. 1880-90. See FADDA, S., OLIVETTI, A., and SILVOLA, G.
- OLIVIER, A. A. Les grands travaux de Paris. Le Métropolitain. 4^{me} édition. Paris, 1887. 8vo.
- OLIVIER, T. Cours de géométrie descriptive. (Atlas of plates.) Paris, 1843-47. 4to.
- Rapport fait au nom du Comité des Arts Mécaniques sur un abaque ou compteur universel par M. L. Lalanne. *Tract.* 4to. vol. 40. Paris, 1846. 4to.
- Traité élémentaire de géométrie, etc. 1852. See TRESKA, H., and OLIVIER, T.
- ÖLLGAARD, F. Beretning om nogle Dampmaskin-Forsøg paa Kjøbenhavns Vandværk. *Tract.* 4to. vol. 117. Kjøbenhavn, 1890. 4to.
- OLMETA, J. Instruction pratique pour l'emploi du chemin de fer et de la télégraphie en campagne. Paris, 1872. 8vo.
- OLMSTED, D. The Mechanism of the Heavens; or, familiar illustrations of astronomy, etc. Lond. 1850. 12mo.
- OLRICK, L. A paper on Giffard's Injector. *Tract.* 8vo. vol. 164. Lond. 1865. 8vo.
- OLSCHEWSKY, W. Katechismus der Baumaterialien, 1879. See HAUENSCHILD, H., and OLSCHESKY, W.
- OLVER, J. S. Improvement of the Nene. *Tract.* folio. vol. 24. Lond. 1875. folio.
- Tables for setting out Half-widths on Railways, Roads, Canals, and other public works; to be applied in field work, and without any previous calculations. *Tract.* 8vo. vol. 383. Lond. 1870. 12mo.
- ÖMAN, V. E. Svensk-Engelsk hand-ordbok. Örebro, 1872. 8vo.
- O'NEILL, C. The Practice and Principles of Calico Printing, Bleaching, Dyeing, etc. 2 vols. Manchester, 1878. 8vo.
- ONTARIO. Report of the Royal Commission on the Mineral Resources of Ontario and Measures for their Development. Toronto, 1890. 8vo.
- Association of Provincial Land Surveyors. Proceedings. 1st Annual meeting. *Tract.* 8vo. vol. 508. Toronto, 1886. 8vo.
- School of Science. Prospectus. *Tract.* 8vo. vol. . Toronto, 1884. 8vo.
- OPPERMANN, C. A. Agenda Oppermann à l'usage des ingénieurs, architectes, agent-voyers, etc. 1881 (1882, etc.). Paris, 1880, etc. 8vo.

- OPPERMANN, C. A.—*continued*. Album pratique de l'art industriel et des beaux-arts. (Atlas of plates.) Paris, 1857-76. 4to.
- Nouvelles annales de la construction, etc. See PERIODICAL PUBLICATIONS.
- Portefeuille économique des machines, etc. See PERIODICAL PUBLICATIONS.
- Le propagateur des travaux en fer. Publication . . . des documents les plus récents . . . relatifs à la métallurgie française et étrangère. 3 vols. Paris, 1867-69. folio.
- Traité complet des chemins de fer économiques d'intérêt local, départementaux, vicinaux, industriels, etc. (Atlas of plates.) Paris, 1873. 8vo.
- 300 projets et propositions utiles. Paris, 1866. 8vo.
- Visites d'un ingénieur à l'Exposition Universelle de 1867 . . . 2^e édition. Paris, 1867. 8vo.
- OPPIZZI, P. Intorno alla costruzione ed all' esercizio delle ferrovie funicolari. Tract. 8vo. vol. 536. Milano, 1894. 8vo.
- L'utilizzazione della gravità nelle discese dei treni sopra forti pendenze. Tract. 8vo. vol. 488. Milano, 1889. 8vo.
- ORANGE, N.S.W. Report . . . on a Supply of Water for the town of Orange: by W. Clark. Sydney, 1877. folio.
- ORBIGNY, C. D'. Description des roches composant l'écorce terrestre, et des terrains cristallins constituant le sol primitif . . . Ouvrage rédigé d'après la classification, les manuscrits inédits, et les leçons publiques de feu P. L. A. Cordier. Paris, 1868. 8vo.
- ORBIGNY, C. D', and GENTE, A. Géologie appliquée aux arts et à l'agriculture, etc. Paris, 1851. 8vo.
- ORDISH, R. M., and MATHESON, E. Proposed Bridge over the Thames by the Tower. Tract. folio. vol. 37. Lond. 1885. folio.
- OREGON. The Pacific North-west. Information for settlers and others. Oregon and Washington Territory. Tract. 8vo. vol. 483. New York, 1883. 8vo.
- ORLEANS. Cartes des canaux d'Orléans, de Briare et de Loing, gravées par les ordres de son altesse le duc d'Orléans. Paris, [1739.] folio.
- ORMEROD, Miss E. A. See MOLESWORTH, Miss C. The Cobham Journals . . . with introduction, tables, etc., by E. A. Ormerod, 1880.
- ORMEROD, G. W. A classified Index to Transactions, Proceedings, and Quarterly Journal of the Geological Society of London, including all the memoirs and notices to the end of 1855. Lond. 1858. 8vo.
- — 2nd edition, including all the memoirs and notices to the end of 1868. Lond. 1870. 8vo.

- ORMEROD, W. P. On the Sanatory Condition of Oxford.
Oxford, 1848. 8vo.
- ORMISTON, T. Deep water Berthage for Ships and Steamers at Bombay. 1872. See FRASER, A., Col., and ORMISTON, T.
- Memoranda on the Toulsee Scheme. 1870. See INDIA.—BOMBAY.—[*Water Supply*.]
- Reasons why the Baroda Goods Terminus should not be at Colaba. *Tract*. 8vo. vol. 161. *Bombay*, 1867. 8vo.
- Report on Famagousta Harbour. 1880. See FAMAGOUSTA.
- Report on the Albert Edward Breakwater and other works proposed for the improvement of the Harbour of Mandavee in Kutch. *Tract*. folio. vol. 34. *Bombay*, 1876. folio.
- ORMSBY, A. S. Disincrustation of Steam Generators. *Tract*. folio. vol. 42. *Lond.* 1883. folio.
- A new idea for the Potable Water-Supply of London. 3rd edition. *Tract*. folio. vol. 33. *Lond.* 1884. folio.
- A new idea for the Water Supply of Towns, etc. *Tract*. 8vo. vol. 151. *Lond.* 1867. 8vo.
- — 2nd edition. *Lond.* 1867. 8vo.
- Potable Water Supply. *Tract*. folio. vol. 43. *Lond.* 1885. folio.
- Report upon the proposed Railway from Dortmund to Enchede. 1866. See FOWLER, Sir JOHN, and ORMSBY, A. S.
- ORR AND CO. Orr's Circle of the Sciences : a series of treatises on the principles of science . . . New edition. 9 vols. *Lond. and Glasgow*, 1860. 8vo.
- ORRIDGE, J. Description of the Gaol at Bury St. Edmunds ; to which are added designs for a prison, made . . . for the Emperor of Russia. *Tract*. 4to. vol. 37. *Lond.* 1819. 8vo.
- ORTH, A. Die neue Viehmarkt- und Schlachthaus-Anlage zu Berlin. *Berlin*, 1872. folio.
- ORTOLAN, J. A. Mémorial du mécanicien d'usine et de navigation. *Paris*, 1878. 8vo.
- ORTON, E. Geological Survey of Ohio. Preliminary Report upon Petroleum and Inflammable Gas, etc. *Columbus*, 1887. 8vo.
- ORTT, J. R. T. Atlas van 44 Kaarten, aantoonende de Dijken en Onderzeesche Oevers van de Calamiteuse Polders in Zeeland, volgens opnemingen en peilingen, gedaan in het Jaar 1860. 1860. folio.
- OSBORN, F. C. Tables of Moments of Inertia and Squares of Radii of Gyration ; supplemented by others on the ultimate and safe strength of Wrought Iron Columns. 2nd edition. *New York City*, 1889. 8vo.

- OSBORN, H. S. The Metallurgy of Iron and Steel . . . with special reference to American materials and processes.
Lond. and Philadelphia, 1869. 8vo.
- A practical Manual of Minerals, Mines and Mining, *etc.*
Lond. 1888. 8vo.
- OSBORNE, E. C., and W. Osborne's Guide to the Grand Junction, or, Birmingham, Liverpool, and Manchester Railway . . . [With a chapter on the history of the rise and progress of Railways.] 2nd edition.
Lond. 1838. 12mo.
- OSBORNE, R. B. Select Plans of Engineering Structures for Railroads and Highways as actually constructed.
Philadelphia, 1885. folio.
- OSER, J. Reden gehalten bei der feierlichen Inauguration des für das Studienjahr 1886-7 gewählten Rectors der K. K. technischen Hochschule in Wien Dr. J. Oser, *etc.* Tract. 8vo. vol. 434.
Wien, 1887. 8vo.
- O'SHAUGHNESSY, J. E. The Water-Supply of Madura.
Madras, 1888. 4to.
- O'SHAUGHNESSY, W. B. The Electric Telegraph in British India.
Lond. 1853. 8vo.
- OSLER, A. F. A Description of the self-registering Anemometer and Rain Gauge erected at the Philosophical Institution, Birmingham. Tract. 4to. vol. 68.
Birmingham, [1840?] 4to.
- OSMOND, F. Essais sur le magnétisme permanent des aciers. Tract. 8vo. vol. 495.
Paris, 1885. 8vo.
- Études métallurgiques. *Paris*, 1888. 8vo.
- Nouveaux procédés de trempe. Tract. 8vo. vol. 495.
Saint Étienne, 1889. 8vo.
- Transformations du fer et du carbone dans les fers, les aciers et les fontes blanches. *Paris*, 1888. 8vo.
- OSMOND, F., and WERTH, —. Théorie cellulaire des propriétés de l'acier. *Paris*, 1885. 8vo.
- OSTEND. Port d'Ostende. Diagrammes des variations de niveau de la mer pendant l'année 1878 (1879-89).
Bruxelles, 1879-89. folio.
(1881 wanting.)
- OSTHOFF, G. Anlagen für die Versorgung der Städte mit Lebensmitteln. Markthallen, Schlachthöfe und Viehmärkte. [*Handbuch der Hygiene*, herausgegeben von T. Weyl. Bd. 6.]
Jena, 1894. 8vo.
- OSWEGO, N.Y. Rules and regulations of the Board of Health, 1889. Also rules for electric wiring, 1890. *Oswego*, 1888-90. 8vo.
- Rules and regulations relating to Plumbing, Drainage and Ventilation in the City of Oswego, *etc.* [*Board of Health and Supervising Board of Plumbers.*] *Oswego, N.Y.*, 1893. 8vo.

- OTAGAWA, M. Remarks on River Crossing and Bridge Piers. [In Japanese, with an English translation in MS.] *Tract.* 8vo. vol. 477. [Tokio, 1888.] 8vo.
- OTAGO, *Province of*. Debates on Dunedin and Port Chalmers Railway, May, 1870. *Dunedin*, 1870. 8vo.
- — *See also*:—DUNEDIN AND PORT CHALMERS RAILWAY.
- Debates on Hundreds Regulation Act, and Railway Schemes, No. 2, etc. *Dunedin*, 1870. 8vo.
- Debates on the Southern Trunk Railway Loan. June, 1870. *Dunedin*, 1870. 8vo.
- Otago Main Central Railway. Report of the Committee. *Wellington*, 1877. folio.
- [Report upon the construction of Reservoirs in the Otago Gold Fields.] *Wellington*, 1868. folio.
- Reports of the Otago Mining Commission. *Wellington*, 1871. folio.
- OTERO, J. Canal de Isabel II. Memoria sobre el estado de las obras en 31 de diciembre de 1853, etc. *Tract.* folio. vol. 6. *Madrid*, 1854. folio.
- OTIS, F. N. Isthmus of Panama. History of the Panama Railroad; and of the Pacific Mail Steamship Company. *New York*, 1867. 8vo.
- OTT, K. VON. The Elements of Graphic Statics. Translated from the German. *Lond.* 1876. 8vo.
- OTTER, H. C., *Capt.* Little Minch. *Tract.* 8vo. vol. 261. *Lond.* 1859. 8vo.
- OTTER, H. C., *Capt.*, and STANTON, W. Western or Outer Hebrides. Sailing directions for the Sound of Harris. *Tract.* 8vo. vol. 261. *Lond.* 1859. 8vo.
- OTTLEY, C. S. [Twenty-six Reports on the drainage of various districts of Ireland.] *Dublin*, 1846–49. 8vo.
- OTTOBEUREN. Nachricht über einen aerostatischen Versuch, welcher in dem Reichsstifte Ottobeuren vorgenommen worden den 22 Jenner, 1784. *Tract.* 8vo. vol. 429. *Ottobeuren*, [1784.] 12mo.
- OTTOLINI, V., and LOSE, F. The Terra-Cotta Architecture of north Italy (xiiith–xvth centuries), portrayed . . . from careful drawings and restorations . . . with woodcut sections, mouldings, etc., and descriptive text . . . Edited by L. Gruner. *Lond.* 1867. 4to.
- OTWAY, R. Treatise on Steam Navigation . . . 2nd edition. *Lond.* 1834. 8vo.
- OUDRY, M. Notice sur l'emploi de la tôle, du fer forgé et de la fonte dans les ponts. 1851. *See* CADIAT, —, and OUDRY, M.
- OUDTSHOORN DIVISION, *Cape Colony*. Report by J. G. Gamble. *Cape Town*, 1877. folio.

- OUGH, H. Hints on House Drainage, *etc.* *Tract.* 8vo. vol. 307.
Lond. 1879. 8vo.
- OURO PRETO.—*Escola de Minas.* Annaes. No. 3. *Tract.* 8vo. vol. 400.
Rio de Janeiro, 1884. 8vo.
- OUSE, *River.* Reasons attempting to show the necessity of the proposed cut from Eau Brink to Lynn . . . addressed to all persons interested in the drainage or navigation of the river Ouse. By a Member of the Committee. *Tract.* 8vo. vol. 159.
Lond. 1793. 8vo.
- Report made to the Board of Trade under Section 41 of the Railway and Canal Traffic Act, 1888, in respect of the River Ouse Navigation, the Kennet and Avon Navigation, and the London and Hampshire Canal. *Lond.* 1891. folio.
- Report on the River Ouse Outfall [by W. H. Wheeler].
King's Lynn, 1882. folio.
- The state and condition of the river Ouse before and after the erecting of Denver sluices, and since their fall. *Tract.* 8vo. vol. 12.
[1721.] 8vo.
- OUSE, *River [Sussex].* Act for improving, continuing, and extending the navigation of the river Ouse, from Lewes Bridge, at the town of Lewes, to Hammer Bridge, in the parish of Cuckfield, *etc.*
Lond. 1790. folio.
- Act for . . . enlarging the powers of two acts . . . for improving the navigation of the river Ouse in the county of Sussex.
Lond. 1814. folio.
- OVERALL, W. H., and H. C. Analytical Indexes to Volumes 2 and 8 of the series of Records known as Remembrancia, preserved among the archives of the City of London, 1580–1664. (1593–1640), *etc.*
Lond. 1870. 8vo.
- OVERBEEK DE MEIJER, — VAN. Les systèmes d'évacuation des eaux et immondices d'une ville. *Tract.* 8vo. vol. 358.
Paris, 1883. 8vo.
- OVERMAN, F. The Manufacture of Iron in all its various branches. Including a description of wood-cutting, coal-digging, and the burning of charcoal and coke . . . 3rd edition.
Philadelphia and Lond. 1854. 8vo.
- The Manufacture of Steel : containing the practice and principles of working and making steel, *etc.* *Lond.* 1851. 12mo.
- — New edition. *Philadelphia,* 1873. 8vo.
- Mechanics for the Millwright, Machinist, Engineer, Civil Engineer, Architect and Student, *etc.*
Philadelphia, 1867. 12mo.
- The Moulder's and Founder's Pocket Guide : with an appendix.
Philadelphia, 1870. 12mo.
- — New edition : with a supplement by A. A. Fesquet.
Philadelphia, 1881. 8vo.

- OVERMAN, F.—*continued*. Practical Mineralogy, Assaying and Mining . . . 7th edition. *Philadelphia*, 1867. 12mo.
- A Treatise on Metallurgy . . . 5th edition. *New York*, 1864. 8vo.
- OWEN, C. H., *Lieut.-Col.* An Essay on the Motion of Projectiles fired from rifled arms, *etc.* *Lond.* 1862. 8vo.
- The Principles and Practice of modern Artillery, *etc.* *Lond.* 1871. 8vo.
- OWEN, C. H., *Lieut.-Col.*, and DAMES, T. L., *Capt.* Lectures on Artillery. 3rd edition. *Woolwich*, 1861. 4to.
(Partly lithographed.)
- — 4th edition. *Woolwich*, 1865. 4to.
- OWEN, D. D. First (and Second) Report of a Geological Reconnoissance of the Northern Counties of Arkansas, *etc.* *Little Rock*, 1858–60. 8vo.
- OWEN, J. Report on the Results of Experiments made . . . on the relative strength of common cast iron and toughened cast iron; with a few additional remarks by M. Stirling. *Tract.* 4to. vol. 40. *Lond.* 1847. 4to.
- OWEN, JACOB. Report on River and Harbour of Cork. 1845. *See* NIMMO, A., KILLALLY, J., and OWEN, J.
- OWEN, JOHN F., *Capt. R.A.* Bronze Steel. *Tract.* 8vo. vol. 255. *Woolwich*, 1875. 8vo.
- Treatise on the Construction of Ordnance, *etc.* 1877, 86. *See* PARLIAMENTARY PAPERS.—ORDNANCE.
- OWENS COLLEGE, *Manchester*. Calendar . . . 1886–87, *etc.* *Manchester*, 1886, *etc.* 8vo.
- Essays and Addresses, by Professors and Lecturers. *Lond.* 1874. 8vo.
- OWER, C. Supplementary Report on the Improvement and Extension of the Harbour of Dundee. *Tract.* 4to. vol. 41. *Dundee*, 1855. 4to.
- OWER, C. and LESLIE, J. Reports on the Improvement and Extension of the Harbour of Dundee. *Tract.* 4to. vol. 31. *Dundee*, 1854. 4to.
- OXFORD. Letters and Report [on the Water Supply of Oxford]. *Tract.* 8vo. vol. 407. *Oxford*, 1885. 8vo.
- [Radcliffe Library.] *See* RADCLIFFE LIBRARY.
- OXFORD, *County of*. Act for Improving the Roads in the County of Oxford. *Lond.* 1784. folio.
- OXFORD AND GREAT WESTERN UNION RAILWAY. Act for making a Railway from Oxford to join the Great Western Railway near Didcot, to be called “The Oxford and Great Western Union Railway.” *Lond.* 1838. folio.

- OXFORD AND GREAT WESTERN UNION RAILWAY—*continued*. Minutes of Evidence taken before the Lords Committees . . . [on the Oxford and Great Western Union Railway.]
Lond. 1837. folio.
- OXFORD CANAL. Act for making and maintaining a navigable Canal from the Coventry Canal Navigation to the city of Oxford.
Lond. 1769. folio.
- Act to consolidate and extend the powers and provisions of the several acts relating to the Oxford Canal Navigation.
Lond. 1829. folio.
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Oxford, 1871, 80, *etc.* 8vo.
- Catalogue of all graduates in Divinity, Law, and Physick; and of all Masters of Arts and Doctors of Musick between 1659 and 1770.
Oxford, 1772. 8vo.
- The Students' Handbook to the University and Colleges of Oxford. 11th edition, revised.
Oxford, 1891. 8vo.
- OXFORD, WORCESTER AND WOLVERHAMPTON RAILWAY. Oxford, Worcester and Wolverhampton Railway. Documents bearing on the question of Gauge. *Tract.* 4to. vol. 80.
[1856.] 4to.
- OXLEY, *Queensland*. Railway from Oxley to Brisbane. Report on alternative lines.
Brisbane, 1873. folio.
- OXYGEN SEWAGE PURIFICATION COMPANY. [Papers relating to the Oxygen Process for the Purification of Sewage.]
Tract. 8vo. vol. 537. *Dublin* [1894.] 8vo.
- OZANAM, J. Recreations in Mathematics and Natural Philosophy, First compos'd by M. Ozanam, lately recomposed by M. Montucla. and now translated . . . with additions by C. Hutton. 4 vols.
Lond. 1803. 8vo.

P.

- PAASCH, H. "From Keel to Truck:" a marine dictionary in English, French and German. *Antwerp*, 1885. 8vo.
- PABOR, W. E. Colorado as an Agricultural State, *etc.* *New York*, 1883. 8vo.
- PACCHIOTTI, I. L'assainissement des villes en Italie. *Turin*, 1891. folio.
- PACIFIC PINE LUMBER COMPANY. Tests of Strength and other data of Douglas Fir, commonly known as Paget Sound or Oregon Pine: and comparisons with other woods used for structural purposes. *Tract. 4to. vol. 121.* *San Francisco*, [1894.] 8vo.
- PACIFIC RAILROAD. First Annual Report of the Board of Directors, and the Report upon the Preliminary Surveys. *Tract. 8vo. vol. 170.* *St. Louis*, 1851. 8vo.
- Memorial to the President and Directors. *Tract. 8vo. vol. 170.* *Jefferson City*, 1852. 8vo.
- Report of Board convened to determine on a standard for construction, *etc.* *Tract. 8vo. vol. 170.* *Washington*, 1866. 8vo.
- PACKER, G., and BENN, W. L. Clongill District, County of Meath. Report . . . on the Drainage and improvement of the lands in the above District. *Dublin*, 1847. 8vo.
- PADDINGTON MARKET. An Act for the establishment and regulation of a Market . . . in the parish of St. Mary, Paddington, *etc.* *Lond.* 1883. folio.
- PADLEY, J. S. Report on the practicability of a Junction Canal between the Rivers Witham and Ancholme. *Tract. folio. vol. 32.* *Lincoln*, 1828. 8vo.
- PAGE, D. Handbook of Geological Terms, Geology and Physical Geography. 2nd edition. *Lond.* 1865. 8vo.
- PAGE, G. G. A paper on the Construction of Chelsea Bridge. *Lond.* 1863. 8vo.
- PAGE, J. Report on the progress of Canal Enlargement between Lake Erie and Montreal. *Tract. 8vo. vol. 277.* *Ottawa*, 1877. 8vo.
- Report on the St. Lawrence Bridge and Manufacturing Company's Scheme for proposed Works, 1883. See MONTREAL.—[Harbours.]
- PAGE, T. Observations on the river Thames and the Port of London, *etc.* *Tract. folio. vol. 6.* [1851.] folio.
- Report on Holyhead and Port Dynllaen Harbours, 1844. See HOLYHEAD HARBOUR.

- PAGE, T.—*continued*. Report on "The Swansea Docks" intended to be constructed on the Burrows, Swansea. *Swansea*, 1846. 8vo.
- Report on the Thames Embankment Railway. [MS.] *Tract. folio. vol. 17.* *Lond.* 1854. folio.
- Report on the Westminster Terminus Railway Bill. [MS.] *Tract. folio. vol. 17.* *Lond.* 1854. folio.
- Report on the eligibility of Milford Haven for Ocean Steam Ships and for a Naval Arsenal. *Tract. 4to. vol. 49.* *Lond.* 1859. 4to.
- Report upon the Improvement of the River Nene, from Peterborough to the sea. *Tract. 8vo. vol. 125.* *Lond.* 1860. 8vo.
- Report upon the system of Weaving by compressed air in the patent Pneumatic Loom. *Tract. 4to. vol. 84.* *Cambridge*, 1864. 4to.
- Report on the maintenance of the Hutchesontown Bridge at Glasgow, and the removal of the weir in the river Clyde. *Tract. 4to. vol. 81.* *Westminster*, 1865. 4to.
- Report on the proposed Harbour of Refuge, new basin and dock at Maryport, etc. *Tract. 4to. vol. 80.* *Lond.* 1865. 4to.
- On Submarine Channel Communication. *Tract. 4to. vol. 63.* [Lond.] 1870. 4to.
- (From the Journal of the Society of Arts.)
- PAGE, Sir T. H. An Account of the commencement and progress in sinking wells, at Sheerness, Harwich and Landguard Fort, etc. *Tract. 8vo. vol. 92.* *Lond.* 1797. 8vo.
- Minutes of evidence of Sir T. H. Page on the second reading of the Eau Brink Drainage Bill. *Tract. 8vo. vol. 389.* *Lond.* 1794. 8vo.
- Observations and Schemes for draining the South Level. [MS.] *Tract. 4to. vol. 54.* *Lond.* 1775. 4to.
- Observations on the present state of the South Level of the Fens. *Tract. 8vo. vol. 91.* 1794. 8vo.
- Observations upon the Embankment of Rivers, and land inclosed upon the sea coast, etc. *Tract. 8vo. vol. 92.* *Tunbridge Wells*, 1801. 8vo.
- Reports relative to Dublin Harbour and adjacent Coast, etc. *Tract. 8vo. vol. 92.* *Dublin*, 1801. 8vo.
- The Reports or Observations of Sir T. H. Page on the means of draining the South and Middle Levels of the Fens. *Tract. 8vo. vol. 91.* 1794. 8vo.
- PAGE, W. Description of a Winding Engine with self-acting variable Expansion. [Newcastle-upon-Tyne, 1877.] 8vo.
- PAGET, F. A. Metropolitan Board of Works. Report on the economy of Road Maintenance and horse draught through Steam Road Rollers. *Tract. 8vo. vols. 270 and 195.* *Lond.* 1870. 8vo.

- PAGET, F. A.—*continued*. On a new form of Permanent Magnet. *Tract. 8vo. vol. 164.* [Lond.] 1869. 8vo.
- On the Wear and Tear of Steam-boilers. *Tract. 8vo. vol. 153.* Lond. 1865. 8vo.
- PAGLIANI, L. Application of a Reservoir Interceptor made on the type of Mouras's Fosse, and of a peat filter for sewage in the system of separate sewerage. [Lond. 1891.] folio.
- PAIN, A. C. Light Railways and Tramroads. *Tract. 8vo. vol. 227.* Lond. 1873. 8vo.
- PAIN, C. S. Hints on Tramways. *Tract. 4to. vol. 85.* Liverpool, [1882?] obl. 8vo.
- PAIN, J. [For reports on Explosions at Pain's Firework Factory, Mitcham:] See MITCHAM.
- PAINE, C. The Elements of Railroading, etc. New York, 1885. 8vo.
- PAISLEY. Select Committee of the House of Commons on the Paisley and District Tramways Bill. Lond. 1884. folio.
- PAIVA, A. DE. Télescopie électrique basée sur l'emploi du selenium. [Portuguese and Fr.] *Tract. 8vo. vol. 329.* Porto, 1880. 8vo.
- PAJARES. Ferrocarril de Leon á Gijón. Impugnacion del proyecto de cambio de trazado atribuido a la empresa concesionaria en la bajada del Puerto de Pajares. *Tract. 8vo. vol. 320.* Madrid, 1880. 8vo.
- PALAA, G. Dictionnaire législatif et réglementaire des chemins de fer, etc. Paris, 1864. 8vo.
- PALACHE, C. The Soda-Rhyolite north of Berkeley. Berkeley, 1893. 8vo.
- PALAISEAU, J. F. G. Métrologie universelle, ancienne et moderne, ou rapport des poids et mesures des empires, royaumes, duchés et principautés des quatres parties du monde. Bordeaux, 1816. 4to.
- PALÉOCAPIA, P. Commission scientifique internationale pour le percement de l'isthme de Suez. Observations sur le discours prononcé par M. Stephenson, etc. *Tract. 8vo. vol. 112.* Paris, 1857. 8vo.
- Considerazioni sul protendimento delle spiagge sull'insabbiamento dei porti dell'Adriatico applicate allo stabilimento di un porto nella rada di Pelusio. (Appendice.) 2 pts. *Tract. 8vo. vol. 344.* Milano, Torino, 1857. 8vo.
- Lettera in risposta al senatore Conte Luigi Sanvitale intorno al progetto d'una strada ferrata tra il golfo della Spezia e il Po per le valli di Magra e di Taro. *Tract. 8vo. vol. 179.* Torino, 1861. 8vo.
- Sul Portosaido. Sensura dell' illustre professor Pietro Paléocapa contro la lettera del Comm. Cialdi al Signor de Lesseps : e risposta de Commendatore Alessandro Cialdi al Prof. Paléocapa. *Tract. 8vo. vol.* Roma, 1868. 8vo.

- PALERMO.**—*Collegio degl' Ingegneri ed Architetti. Atti.* 1878–79 (1880, etc.). *Palermo*, 1879, etc. 8vo.
- *Esposizione nazionale*, 1881–82. Catalogo della esposizione collettiva del Ministero dei lavori pubblici. *Imola*, 1892. 8vo.
- PALEY, F. A.** *A Manual of Gothic Mouldings: a practical treatise on their formations, gradual development, combinations, and varieties, etc.* *Lond.* 1845. 8vo.
- PALISSY, B.** *Resources: a treatise on "Waters and Springs": written . . . in 1557. Translated by E. E. Willett, etc. Tract.* 8vo. vol. 496. *Brighton*, [1876.] 8vo.
- PALLADIO, A.** *Le fabbriche e i disegni di A. Palladio raccolti ed illustrati da O. B. Scamozzi. 2a edizione.* 4 vols. *Vicenza*, 1786. folio.
- *Le terme dei Romani disegnate da A. Palladio e ripubblicate con la giunta di alcune osservazioni da O. B. Scamozzi, etc.* *Vicenza*, 1785. folio.
- *The Four Books of Architecture. . . . Translated from the Latin by J. Ware.* *Lond.* 1738. folio.
- PALLET, H.** *The Miller's, Millwright's, and Engineer's Guide.* *Philadelphia*, 1869. 8vo.
- PALLISER, Sir W.** *The Construction of Heavy Rifled Ordnance. Tract.* 8vo. vol. 206. *Lond.* 1868. 8vo.
- *The Conversion and Rifling of Cast-iron Ordnance and chilled white iron projectiles. Tract.* 8vo. vol. 206. *Lond.* 1867. 8vo.
- *A Letter . . . containing an account of some experiments made with a view of determining the relative strains on a gun, etc. Tract.* 8vo. vol. 206. *Norwich*, 1864. 8vo.
- *Letter . . . on the Conversion of Smooth-bore Cast-iron Guns. Tract. folio.* vol. 9. *Lond.* 1870. folio.
- *On Armour Fastenings. Tract.* 4to. vol. 66. *Lond.* 1867. 4to.
- *Photographs of some specimens of Shot and Guns. Tract. folio.* vol. 9. 1867. folio.
- *Remarks and experiments upon the cause of the explosion of the 38-ton gun on board H.M.S. "Thunderer." Tract.* 8vo. vol. 312. *Lond.* 1879. 8vo.
- *A Treatise on Compound Ordnance.* *Lond.* 1863. 8vo.
- *Trial of a 32-pounder cast-iron Gun converted into a 64-pounder Rifled Gun of 60 cwt., etc. Tract.* 8vo. vol. 206. *Lond.* 1866. 8vo.
- *The Use of Earthen Fortresses for the defence of London, and as a preventive against invasion. Tract.* 8vo. vol. 206. *Lond.* 1871. 8vo.
- PALMA, A., Count.** *A summary Account of Steam Boats for Lord Cochrane's Expedition, etc. Tract.* 8vo. vol. 55. *Lond.* 1826. 8vo.

- PALMER, F. I. Descriptive Account of an horizontal-acting and disconnecting Spur-Torpedo-Ram, *etc.* *Lond.* 1873. 4to.
- Floods in the Thames Valley and the Relief of London Bridge and its approaches. *Lond.* 1877. 8vo
- PALMER, F. W. Extracts from an Address . . . on "What the West says about Protection." *Tract.* 8vo. vol. 483. *Philadelphia*, 1873. 8vo
- PALMER, G. [Reports on Famine Relief, and Public Works Department, in H.H. the Nizam's Dominions. 1879–85.] *See INDIA.—HYDERABAD.*
- PALMER, H. R. Description of a Railway on a new principle with observations on those hitherto constructed, and a table showing the comparative amount of resistance on several now in use, *etc.* *Tract.* 8vo. vol. 1. *Lond.* 1823. 8vo
- — 2nd edition. *Tract.* 8vo. vol. 32. *Lond.* 1824. 8vo
- Observations on the Motions of Shingle Beaches. *Tract.* 4to. vol. 9 *Lond.* 1834. 4to
- Report on the Improvement of the Rivers Mersey and Irwell between Liverpool and Manchester, describing the means of adapting them for the navigation of sea-going vessels. *Tract.* 8vo vol. 71. *Lond.* 1840. 8vo
- Report on the proposed Eastern Entrance to the London Docks *Tract.* folio. vol. *Lond.* 1828. folio
- Report on the proposed Improvements in the Port of Ipswich *Tract.* 4to. vol. 34. *Lond.* [1836.] 4to
- PALMER, H. S., *Capt.* The Ordnance Survey of the Kingdom. *Lond.* 1873. 8vo
- PALMER, S. Index to "The Times" Newspaper, 1862, pts. 2 and 3 1867, pt. 4, 1869, *etc.* *Lond.* 1868, *etc.* 4to
- PALMERSTON, S. *Australia.* Palmerston and Pine Creek Line [Specification and 2 vols. of Drawings.] *Adelaide*, 1885. folio
- PALMIERI, L. The Eruption of Vesuvius in 1872: with notes and an introductory sketch by R. Mallet. *Lond.* 1873. 8vo
- PAMBOUR, F. M. G. *DE, Count.* A new Theory of the Steam Engine, *etc.* *Tract.* 8vo. vol. 62. *Lond.* 1838. 8vo
- *Théorie des machines à vapeur.* 2^e édition. (Atlas of plates.) *Paris*, 1844. 8vo
- The Theory of the Steam Engine, *etc.* *Lond.* 1839. 8vo
- *Traité théorique et pratique des machines locomotives, etc.* *Paris*, 1835. 8vo
- A practical Treatise on Locomotive Engines upon Railways, *etc.* (Appendix.) *Lond.* 1836. 8vo
- — 2nd edition. *Lond.* 1840. 8vo
- PAMELY, C. The Colliery Manager's Handbook, *etc.* *Lond.* 1891. 8vo

- PANAMA. Le canal de Panama et ses gaspillages. Lettres d'un ingénieur. *Tract.* 8vo. vol. 444.
Paris, 1887. 8vo.
- Correspondence respecting the projected Panama Canal.
Lond. 1882. folio.
- Isthmus of Panama. *Tract.* 8vo. vol. 440. [1850.] 8vo.
(One of "Chambers' Papers for the People.")
- New Granada and the United States of America. Final diplomatic controversy relating to the occurrences that took place at Panama on the 15th April, 1856. *Tract.* 8vo. vol. 439.
Liverpool, 1857. 8vo.
- Projet de loi ayant pour objet d'autoriser la Compagnie universelle du canal interocéanique de Panama à faire une émission d'obligations à lots. *Tract.* 4to. vol. 104. Paris, 1886. 4to.
- PANAMA RAILROAD. Communication of the Board of Directors to the Stockholders; together with the report of the chief engineer to the directors. Appendix. *Tract.* 8vo. vol. 104.
New York, 1855. 8vo.
- Instructions to captains and pursers of the Panama Railroad Company's Central American Steamers. *Tract.* 8vo. vol. 441.
New York, 1862. 8vo.
- PANCIROLLUS, G. The History of many memorable things lost, which were in use among the ancients: and an account of many excellent things found, now in use among the moderns, both natural and artificial. Translated from the Latin. 2 vols.
(Vol. 2 wanting.) Lond. 1715. 12mo.
- PANGBORN, J. G. The new Rocky Mountain Tourist, Arkansas Valley, and San Juan Guide. 3rd edition. *Tract.* 4to. vol. 82.
Chicago, 1878. 4to.
- Picturesque Baltimore and Ohio Railway, historical and descriptive.
Chicago, 1883. 4to.
- PAPAL STATES. Motu proprio di Pio VII. in data 23 ottobre, 1817, sul regolamento dei lavori pubblici di acque e strade.
Roma, [1817.] 8vo.
- PAPONOT, F. Achèvement du canal de Panama: étude technique et financière. Paris, 1888. 8vo.
- Le Canal de Panama. Étude rétrospective historique et technique, etc. Paris, 1890. 8vo.
- L'Égypte, son avenir agricole et financier. Paris, 1884. 8vo.
- Suez et Panama; une solution. Paris, 1889. 8vo.
- PAPPENHEIM, G. Populäres Lehrbuch der Müllerei.
Wien, 1878. 8vo.
- PAPWORTH, W. Art Education: an address, etc. *Tract.* 8vo. vol. 497.
Lond. 1889. 8vo.

- PAPWORTH, W.—*continued*. John P. Papworth, Architect to the King of Wurtemberg: a brief record of his life and works.
Lond. 1879. 8vo.
- PARASACCHI, D. Raccolta delle principali fontane dell'inclitta città di Roma.
Roma, 1637. 4to.
- PARDO, M. Carreteras. Texto y atlas. 2 vols.
Madrid, 1892. 8vo. and 4to.
- Materiales de construcción 2 vols. *Madrid*, 1885. 8vo.
- — Segunda edición, corregida y aumentada. Texto y atlas. 2 vols. *Madrid*, 1891. 8vo.
- PARENT-DUCHATELET, A. J. B. Hygiène publique; ou mémoires sur les questions les plus importantes de l'hygiène, etc. 2 vols.
Paris, 1836. 8vo.
- PARETO, R. Irrigation et assainissement des terres. Traité de l'emploi des eaux en agriculture. 4 vols. (Atlas of plates.)
Paris, 1851. 12mo. and 4to.
- Sulle bonificazioni, risaie ed irrigazioni del regno d'Italia.
Milano, 1865. 4to.
- PARIDANT, L. Des lignes de navigation à vapeur entre l'Europe et le Brésil.
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- PARIEU, E. DE. L'union monétaire de la France, de l'Italie, de la Belgique et de la Suisse. Le Münzverein latin. *Tract.* 8vo. vol. 172.
Paris, 1866. 8vo.
- PARIS. Routes de Paris à Dieppe et au Havre. [A map.]
[*Paris*?] 1736. folio.
- *British Chamber of Commerce*. Law relative to the Residence of Foreigners in France . . . promulgated 8th August, 1893, etc. *Tract.* 4to. vol. .
Paris, 1893. 4to.
- Report . . . for the year 1892. *Lond.* 1893. 8vo.
- Report upon Metals, Machinery, etc. *Tract.* folio. vol. 24.
[*Lond.*] 1876. folio.
- *Comité des Travaux historiques et scientifiques*. Liste des membres . . . du Comité, des correspondants . . . du Ministère de l'Instruction publique [et] des sociétés savantes de Paris et des départements.
Paris, 1885. 8vo.
- *Compagnie générale des Omnibus*. Rapports du conseil d'administration et de la commission de comptabilité sur les comptes de l'exercice 1881–88 (1890).
Paris, 1882–91. 4to.
- *Conservatoire des Arts et Métiers*. Annales du Conservatoire. Vols. 1–10.
Paris, 1860–73. 8vo.
- — 2^e série. Vol. 1, etc. *Paris*, 1889, etc. 8vo.
- Catalogue des collections. *Par's*, 1882. 8vo.

- PARIS.—[*Conservatoire des Arts et Métiers*].—*continue*. Cours publics et gratuits de Sciences, appliquées aux Arts. [Prospectuses.] Année 1886–87(–91). 3 pts. 1886–90. folio.
- Rapport sur le projet d'institution au Conservatoire d'une chaire d'art appliqué aux métiers, par É. Trélat. *Tract.* 8vo. vol. 508. Paris, [1892.] 8vo.
- *École centrale d'Architecture*. L'amphithéâtre en 1865 et 1866. Leçons d'ouverture. Paris, 1866. 8vo.
- *École centrale des Arts et Manufactures*. Programme, etc. *Tract.* 8vo. vol. 54. Paris, 1838. 8vo.
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- *École des Ponts et Chaussées*. Catalogue des livres composant la bibliothèque de l'École, etc. Paris, 1872. 8vo.
- Catalogue supplémentaire de la bibliothèque. Paris, 1881. 8vo.
- Catalogue des manuscrits de la bibliothèque. Paris, 1886. 8vo.
- Catalogue descriptif des modèles, instruments, et dessins des galeries de l'École, par H. Baron. Paris, 1873. 8vo.
- Collection de dessins distribués aux élèves. (Atlas of plates.) Paris, 1857–63, 1875, etc. 8vo. and folio.
- Décret portant organisation de l'École. Paris, 1867. 8vo.
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Cours de machines à vapeur. Clapeyron, professeur. Edition 1853-54. Re-impression 1858.
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Cours de travaux maritimes. 1889-90.
- Notes prises par les élèves aux conférences sur les machines à
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- Notes prises au cours de navigation intérieure, 1876-77.
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- Notice sur l'École des Ponts et Chaussées. *Tract.* 8vo. vol. 454.
Paris, 1873. 8vo.
(From the Catalogue de l'Exposition universelle, 1873.)
- Programme de l'enseignement intérieur . . . 1867 (1875, 1888).
Paris, 1867-89. 4to.
- Programme du concours, 1866-7 (1867-8, 1888-9).
Paris, 1867-89. folio.
- Programme des conditions d'admission à l'École des Ponts et
Chaussées. Paris, [] 8vo.
- Recueil de 245 dessins ou feuilles de texte relatifs à l'art de
l'ingénieur. 4 vols. Paris, 1820-27. folio.
- Règlement intérieur de l'École. [Paris,] 1867. 8vo.
- Résumé des conférences sur le service vicinal. Paris, 1874. 4to.
- *École Polytechnique.* Journal. Paris, 1795, etc. 4to.
(The title has been changed several times. It was at first "Journal Polytechnique: ou, bulletin du
travail fait à l'École centrale des travaux publics.")
- Programmes pour l'admission et pour l'enseignement, arrêtés par
la commission nommée en exécution de la loi du 5 juin, 1850, et
approuvés par le ministre de la guerre. *Tract.* 4to. vol. 56.
Paris, 1850. 4to.
- Programmes de l'enseignement intérieur et instruction pour
l'admission. 3 vols. Paris, 1866-68, 1888. 4to. and 8vo.
- *École spéciale d'Architecture.* Séance d'ouverture du 11 nov.
1885. Année, 1885-86. *Tract.* 8vo. vol. 405.
Paris, 1885-86. 8vo.

- PARIS.—[*École spéciale d'Architecture*]*—continued.* Année, 1886–91.
Séance d'ouverture du 11 novembre, 1886, (10 novembre, 1887,
1890.) 4 pts. *Paris*, 1886–91. 8vo.
- *Exposition universelle*, 1855. Catalogue officiel.
Paris, 1855. 8vo.
- — 2^e édition. *Paris*, [1855.] 8vo.
- Catalogue des objets exposés dans la section britannique. [*Eng.*
and Fr.] *Lond.* 1855. 8vo.
- Rapports du jury mixte international : publiés sous la direction
du prince Napoléon, etc. 2 vols. *Paris*, 1856. 4to.
- Recueil des pièces et documents officiels concernant l'Exposition
universelle de 1855 : publié par E. Panis. *Tract.* 4to. vol. 53.
Paris, [1856?] 4to.
- Reports on the Paris Universal Exhibition. *Lond.* 1856. 8vo.
- *Exposition universelle*, 1867. Catalogue of contributions trans-
mitted from British Guiana. *Lond.* 1867. 8vo.
- Catalogue of the natural and industrial products of New South
Wales forwarded to the Universal Exhibition.
Sydney, 1867. 8vo.
- L'exposition universelle de 1867 étudiée au point de vue des
intérêts du département de l'Aisne. *Laon*, 1868. 8vo.
- Notice sur l'état des travaux publics en Espagne et sur la
législation spéciale qui les régit. Traduit de l'espagnol.
Madrid, 1867. 8vo.
- Notices sur les collections, cartes et dessins relatifs au service du
corps impérial des mines, réunis par les soins du Ministère de
l'Agriculture, etc. *Paris*, 1867. 8vo.
- Notices sur les modèles, cartes et dessins relatifs aux travaux
publics, réunis par les soins du Ministère de l'Agriculture, etc.
Paris, 1867. 8vo.
- Bericht über die Weltausstellung zu Paris im Jahre 1867.
11 vols. in 6. *Wien*, 1869. 8vo.
- Rapports du jury international. 13 vols. *Paris*, 1868. 8vo.
- Reports of the United States Commissioners, etc. 6 vols.
Washington, 1870. 8vo.
- Report on Asphalt and Bitumen, as applied to the construction
of Streets and Sidewalks in Paris . . . with observations upon
Macadamized Streets and Roads: by A. Beckwith. [*Report of*
the United States Commissioners.] *Washington*, 1868. 8vo.
- Report on Béton-coignet, its fabrication and uses . . . By
Leonard F. Beckwith. [*Report of the United States Commis-*
sioners.] *Washington*, 1868. 8vo.
- Paris Universal Exposition, 1867. Reports of the United States
Commissioners. The production of iron and steel in its economic
and social relations. *Tract.* 8vo. vol. 174.
Washington, 1868. 8vo.

- PARIS.—[*Exposition universelle*, 1867]—*continued*. Reports of artisans selected by a committee appointed by the Council of the Society of Arts to visit the . . . Exhibition. *Lond.* 1867. 8vo.
- Rapports du jury international. 13 vols. *Paris*, 1868. 8vo.
- *Exposition universelle*, 1878. Catalogue des échantillons de matériaux de construction. *Paris*, 1878. 8vo.
- Catalogue des minéraux, roches et fossiles du Canada, *etc.* 1878. See HARRINGTON, B. J., and SELWYN, A. R. C.
- Notice sur les houillères de Dombrowa. *Tract.* 8vo. vol. 315. *Paris*, 1878. 8vo.
- Catalogue of exhibits in the Western Australian section of the Paris Universal Exhibition of 1878. *Tract.* 8vo. vol. 295. *Perth, W.A.*, [1878.] 8vo.
- Catalogue of the objects exhibited by Sir Joseph Whitworth & Co., Limited, at the Paris Exhibition, 1878. *Tract.* 4to. vol. 109. *Manchester*, 1879. 4to.
- Catalogue officiel de la section anglaise. 2 parts. *Lond.* 1878. 8vo.
- [Catalogues of the objects exhibited by H. Schneider & Co. (Usines du Creusot).] *Tract.* 8vo. vol. 343, and folio. vol. 29. *Paris*, 1878. 8vo. and folio.
- Manuel de la section des Indes britanniques. *Lond.* 1878. 8vo.
- Catalogue spécial du grand-duché de Finlande. *Tract.* 8vo. vol. 467. *Paris*, 1878. 8vo.
- Chine. Douanes maritimes impériales. Catalogue spécial de la collection. *Shanghai*, 1878. 4to.
- Congrès et conférences du Palais du Trocadero. 3 vols. and 31 Nos. *Paris*, 1879–81. 8vo.
- Monographie des palais et constructions diverses de l'Exposition, *etc.* 2 vols. *Paris*, 1882. folio.
- Notices sur les modèles, cartes, et dessins relatifs aux travaux des Ponts et chaussées. *Paris*, 1878. 8vo.
- Notice sur les objets envoyés par la Société autrichienne des chemins de fer de l'État. *Tract.* 4to. vol. 81. *Vienne*, 1878. 4to.
- Notices sur les objets exposés par le dépôt des fortifications. Section française. *Tract.* 8vo. vol. 287. *Paris*, 1878. 8vo.
- Portugal. La section photographique ou artistique de la direction générale des travaux géographiques. Catalogue. *Tract.* 8vo. vol. 476. *Lisbonne*, 1878. 8vo.
- Regno d'Italia. Catalogo dei lavori monografici e degli oggetti inviati all' esposizione universale di Parigi nel 1878. *Tract.* 8vo. vol. 370. *Roma*, 1878–81. 8vo.
- Relazioni dei giurati Italiani. Classe L. Materiale e processi dell' industria mineraria metallurgica. *Roma*, 1879. 8vo.

- PARIS.—[*Exposition universelle*, 1878]—*continued*. Report of the Commissioners for Victoria. *Melbourne*, 1879. 8vo.
- Reports of the United States Commissioners. 5 vols. *Washington*, 1880. 8vo.
- *Exposition universelle*, 1889. Associations françaises des propriétaires d'appareils à vapeur du nord de la France . . . Exposition collective de défauts de tôles—corrosions—incrustations, etc. *Lille*, 1889. 8vo.
- Bulletin officiel. 2 vols. *Paris*, 1886–1889. folio and 8vo.
- Bulletin officiel quotidien illustré. 2 vols. *Paris*, 1889. folio.
- Catálogo oficial de las muestras de minerales exhibidas en la sección Argentina anexa a la Exposición de Paris, 1889. *Buenos Aires*, 1889. 4to.
- Catalogue général officiel. 8 vols. *Lille*, 1889. 8vo.
- Catalogue : édition enrichie de vues, de scènes, de reproductions d'objets, etc. *Paris*, 1889. 4to.
- Catalogue de la collection minéralogique du Chili envoyée à l'Exposition Universelle de Paris de 1889. *Tract*. 8vo. vol. 480. *Santiago*, 1889. 8vo.
- Chemins de fer de l'Etat. Exposition Universelle de 1889. Notices sur le matériel de la voie et de l'exploitation. *Paris*, 1889. folio.
- Commission chargée des travaux de la section Argentine à l'Exposition de Paris. L'agriculture et l'élevage dans la République Argentine. Ouvrage publié sous la direction de F. Latzina. *Paris*, 1889. 8vo.
- Compagnie des chemins de fer de l'Est. Notices sur les objets présentés à l'Exposition universelle de 1889. [1889.] 8vo.
- Congrès international de bibliographie des sciences mathématiques. Procès-verbal sommaire. *Paris*, 1889. 8vo.
- Congrès international de chimie. Procès-verbaux des séances. *Paris*, 1889. 8vo.
- Congrès international de mécanique appliquée. Procès-verbaux sommaires, etc. *Paris*, 1889. 8vo.
- Congrès international de photographie. [Various papers.] *Paris*, 1889. 8vo.
- Congrès international des architectes. Procès-verbaux sommaires. *Paris*, 1890. 8vo.
- Congrès international des habitations à bon marché. Compte rendu sommaire. *Paris*, 1889. 8vo.
- Congrès international des mines et de la métallurgie. Plates. *Paris, St. Étienne*, 1889. 8vo.
- Congrès international des procédés de construction. Comptes rendus des séances, etc. *Paris*, 1891. 8vo.

PARIS.—[*Exposition universelle*, 1889]—*continued*. Congrès international des procédés de construction. [Documents.]

Paris, 1889. 8vo.

— Congrès international des travaux maritimes. [Various reports relating to Paris, Rouen, Nantes, and Valencia.]

Paris, 1889. 8vo.

— Congrès international de l'utilisation des eaux fluviales. Comptendu détaillé des travaux du Congrès.

Paris, 1889. 8vo.

— Congrès international de l'utilisation des eaux fluviales. [14 reports.]

Paris, 1889. 8vo.

— Congrès international de l'utilisation des eaux fluviales. Procès-verbaux des séances. Direction générale de l'exploitation.

Paris, 1889. 8vo.

— [Descriptions and lists of objects exhibited and manufactured by the Compagnie anonyme des forges de Chatillon et Commentry.] 7 pts. *Tract. 4to. vol. 118.*

Paris, 1889. 4to.

Aciers au creusot. Aciers outils.

Études sur la métallurgie du métal fondu.

Fils et câbles métalliques.

Fournitures militaires.

Houillères.

Moulages d'acier.

Nomenclature générale de sproduits exposés par la Compagnie.

— Exposition rétrospective du travail et des sciences anthropologiques. Section III. Arts et métiers. Règlement général. 2 parts.

Paris, 1888. 8vo.

— Notices sur les modèles, dessins et documents divers relatifs aux travaux des Ponts et Chaussées et des Mines.

Paris, 1889. 8vo.

— [Papers relating to the Exhibition.] *Paris*, 1889. 8vo. and folio.

— Report of the Executive Council of the British Section. *Tract. 8vo. vol. 497.*

London, 1890. 8vo.

— Report on Civil Engineering, Public Works and Architecture, 1892. See WATSON, WILLIAM, *Ph.D.*, of *Boston*.

— *Exposition Internationale d'Électricité*, 1881. Catalogue général officiel.

Paris, 1881. 8vo.

— — [Another edition.]

Vienne, 1883. 8vo.

— Report on the . . . Exhibition.

Washington, 1884. 8vo.

— Réunion internationale des électriciens : comptes rendus.

Paris, 1882. 8vo.

— Administration Jury Reports.

Paris, 1883. 8vo.

— *Palais de Justice*. Rapport de la commission sur le chauffage et la ventilation des bâtiments du Palais de Justice. *Tract. 4to. vol. 62.*

Paris, 1860. 4to.

— *Société des anciens élèves des Écoles Nationales d'Arts et Metiers*. Annuaire.

Paris, 1876–8. 8vo.

— *Théâtre-Lyrique*. Rapport de la commission chargée d'examiner les projets présentés pour le chauffage et la ventilation du Théâtre-Lyrique et du Théâtre du Cirque Impérial. *Tract. 4to. vol. 49.*

Paris, 1861. 4to.

- PARIS—*continued*. [*Abattoirs*.] The Abattoirs of Paris and their practical effect, as shown by a report from the Minister of the Interior. *Tract*. 8vo. vol. 216. *Lond*. 1849. 8vo.
- [*Bridges*.] Description du pont en fer coulé construit à Paris, sur la Seine, en face du Jardin du Roi. *Tract*. 4to. vol. 13. *Rouen*, 1814. 4to.
- [*Drainage and Sewerage*.] Assainissement de Paris. Transformation de la vidange et suppression de la voirie de Bondy. Achèvement des égouts et emploi de leurs eaux dans l'agriculture. *Tract*. 8vo. vol. 247. *Paris*, 1871. 8vo.
- Service de l'assainissement. Notes de l'Inspecteur général des ponts et chaussées, Directeur des travaux de Paris à l'appui du projet de budget de l'exercice 1890. *Tract*. 4to. vol. *Paris*, 1890. 4to.
- Note du directeur des travaux de Paris sur la situation du service des eaux et égouts. *Paris*, 1879. 4to.
- [*Finance*.] City of Paris Budget for the year 1866: translated by H. La Hooke. *Tract*. 4to. vol. 53. *Lond*. 1866. 4to.
- Budget de l'exercice 1883–(84). *Paris*, 1883–84. 4to.
- [*Gas*.] Compagnie parisienne. Ville de Paris. Éclairage au gaz. *Tract*. 8vo. vol. 198. *Paris*, 1860. 8vo.
- Services public et particulier de l'éclairage par le gaz dans la ville de Paris. Cahier des charges. *Tract*. 4to. vol. 53. *Paris*, 1846. 4to.
- [*Observatory*.] Mémoire sur l'état actuel de l'Observatoire impérial: présenté par les astronomes, etc. *Tract*. 4to. vol. 66. *Paris*, 1870. 4to.
- Atlas météorologique de l'Observatoire de Paris, 1872–74. *Paris*, 1875. folio.
- [*Railways*.] Exposé général des études faites pour le tracé des chemins de fer de Paris en Belgique et en Angleterre, et d'Angleterre en Belgique, desservant, au nord de la France, Boulogne, Calais, Dunkerque, Lille et Valenciennes. *Paris*, 1837. 4to.
- Projet de chemin de fer métropolitain de Paris. Rapport. *Paris*, 1872. 4to.
- Inaugural meetings of the Jubilee of Paris Railways, 1887. *Tract*. 4to. vol. 104. [*Lond*.] 1887. 4to.
- [*Water Supply*.] Mémoire sur les eaux de Paris, présenté à la Commission municipale par M. le préfet de la Seine. *Tract*. 4to. vol. 53. *Paris*, 1854. 4to.
- Documents relatifs aux eaux de Paris. (Atlas of plates.) *Paris*, 1858–61. 4to.
- Compagnie générale des eaux. Recueil de pièces concernant la régie des eaux de la ville de Paris. *Tract*. 8vo. vol. 194. *Paris*, 1863. 8vo.

PARIS, F. E., *Admiral*. Catéchisme du marin et du mécanicien à vapeur, ou traité des machines à vapeur, etc.

Paris, [1860 ?] 8vo.

— Dictionnaire de marine, etc. 1848–51. See BONNEFOUX, P. M. G. DE, Baron, and PARIS, F. E.

— Discours de F. E. Paris. Funerailles de M. Dupuy de Lôme le 4 février. 1885. *Tract.* 4to. vol. 93. Paris, 1885. 4to.

— Essai sur la construction navale des peuples extra-européens : ou collection des navires et pirogues construits par les habitants de l'Asie, de la Malaisie, du Grand Océan et de l'Amerique, etc. (Atlas of plates.) 2 vols. Paris, [1850.] folio.

— Note sur les navires cuirassés. *Tract.* 8vo. vol. 147.

Paris, 1863. 8vo.

— Projet de navires de mer à tourelles. Paris, 1868. 8vo.

— Souvenirs de marine. Collection de plans de navires et des bateaux de tous les pays. 4 vols. Paris, 1877–86. folio.

— Traité de l'hélice propulsive. Paris, 1855. 8vo.

— Utilisation économique des navires à vapeur, etc. *Tract.* 4to. vol. 31. Paris, [1860 ?] 8vo.

— Vocabulaire des termes de la marine à vapeur, allemand-français, danois-français, espagnol-français, hollandais-français, italien-français, russe-français, et suédois-français.

Paris, [1861 ?] folio.

PARIS, F. E., *the Elder*, and A., *the Younger*. Note sur un trace-roulis et sur un trace-vague. *Tract.* 4to. vol. 55. [Paris,] 1867. 4to.

PARIS, J. A. The Life of Sir H. Davy. 2 vols.

Lond. 1831. 8vo.

— On the Accidents which occur in the Mines of Cornwall in consequence of the premature explosion of gunpowder in blasting rocks, etc. Penzance, 1817. 8vo.

PARKER, F. H. Report of tests on the strength of structural Material made at the Watertown Arsenal.

Washington, 1884. 8vo.

PARKER, H. Report on the proposed Deduru-oya project. 1889. See INDIA.—CEYLON.—[Irrigation.]

PARKER, J. H. The Archæology of Rome. 12 pts.

Oxford, 1876–83. 8vo.

Pt. 1. Primitive Fortifications. 2nd edition. 2 vols.

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(Pts. 2, 3, 7, wanting.)

— A concise Glossary of terms used in Grecian, Roman, Italian and Gothic Architecture. New edition, etc. Oxford, 1869. 8vo.

- PARKER, J. L. Tables of Discharges in open Channels and over Weirs. *Tract. 8vo. vol. 210.* *Roorkee, 1870. 8vo.*
- PARKER, T. N. An Essay on the construction, hanging and fastenings of Turnpike Gates. 2nd edition, enlarged. *Lond. 1804. 8vo.*
- An Essay on the construction, hanging and fastening of a Turnpike gate, turn-wicket, etc. *Tract. 8vo. vol. 20.* *Onvestry, 1816. 8vo.*
- PARKER, WILLIAM. On the advantages of a patent process for increasing the product of Sugar from Cane Juice, 1838. See TERRY, C., and PARKER, W.
- PARKER, WILLIAM, *M. Inst. C.E.* Copper Steam Pipes for modern High-Pressure Engines. *Tract. 4to. vol. 110. [Lond.] 1888. 4to.*
- Experience in the use of thick Steel Boiler Plate. *Tract. 4to. vol. 97.* *Lond. [1885.] 8vo.*
- On the Progress and Development of Marine Engineering. *Tract. 4to. vol. 99.* *Lond. 1886. 4to.*
- On the use of Steel Castings in lieu of Iron and Steel Forgings for Ship and Marine Engine Construction. *Tract. 8vo. vol. 466.* *[Lond. 1883.] 8vo.*
- Report of a visit to Steel Manufacturing and Engineering Works in France. *Tract. 8vo. vol. 421.* *[Lond. 1883.] 8vo.*
- Report to the Committee of Lloyd's Register on an Explosion on board the Royal Mail Steam Packet Company's S.S. "Elbe," October, 1887. *Tract. 8vo. vol. 450.* *Lond. 1887. 8vo.*
- PARKER, WILLIAM, *M. Inst. C.E.*, and MILTON, J. T. Report on the use of Cast Steel for Crank Shafts and other parts of Engines. [Prepared for the information of the Committee of Lloyd's Register.] *Tract. 4to. vol. 91.* *Lond. 1882. 4to.*
- PARKER-RHODES, C. E. Our Daily Water Supply. *Lond. 1887. 8vo.*
- The true position of the Suez Canal. *Tract. 8vo. vol. 406.* *Lond. 1883. 8vo.*
- Universal Reading of time or Os., midnight to 24 hours midnight. *Tract. 8vo. vol. 385.* *[Lond. 1885.] 8vo.*
- PARKES, E. A. A Manual of Practical Hygiene, prepared especially for use in the medical service of the army. *Lond. 1864. 8vo.*
- — 6th edition, edited by F. S. B. F. De Chaumont. *Lond. 1883. 8vo.*
- Public Health . . . Revised by W. Aitken. *Lond. 1876. 8vo.*
- PARKES, Sir H. The present Conditions and future Prospects of Australia. *Tract. 8vo. vol. 338.* *Melbourne, 1880. 8vo.*
- PARKES, J. Essays on the Philosophy and Art of Land-drainage. *Tract. 8vo. vol. 99.* *Lond. 1848. 8vo.*

- PARKES, J.—*continued*. Fallacies on Land-drainage exposed: a refutation of a letter by Lord Wharnccliffe to Philip Pusey, *etc*. *Tract*. 8vo. vol. 99. *Lond*. 1851. 8vo.
- Observations on the economical Production of Steam, and the Consumption of Smoke. *Tract*. 8vo. vol. 219. *Lond*. 1822. 8vo.
- On the Influence of Water on the Temperature of Soils, *etc*. *Tract*. 8vo. vol. 61. *Lond*. 1844. 8vo.
- Report on A. M. Perkins' Patent Steam Boiler. *Tract*. 4to. vol. 37. *Lond*. 1840. 4to.
- Report on Drain-tiles and Drainage. *Tract*. 8vo. vol. 61. *Lond*. 1843. 8vo.
- Report on the comparative trials of a Disc and Reciprocating Engine. *Tract*. 8vo. vol. 62. *Lond*. 1842. 8vo.
- Report on the Exhibition of Implements, and of a trial of Messrs. Ransome's portable Steam-Threshing Engine and Hand-Threshing machines, at the Liverpool meeting, 1841. *Tract*. 8vo. vol. 62. *Lond*. 1841. 8vo.
- Report on the patent Disc Steam Engine. *Tract*. 8vo. vol. 62. *Lond*. 1841. 8vo.
- See NAVILLE, J. De l'assainissement . . . Suivi du drainage profond par Parkes. [1851.]
- PARKES, J., and MANBY, C. Reports to the Provisional Committee of the Anthracite Patent Company, on Player's Patent Furnace, applied to the boilers of the "Anthracite" steam vessel. *Tract*. 4to. vol. 38. *Lond*. 1839-40. 4to.
- PARKES, W. Bombay and Kurrachee Tide-tables, *etc*. *Tract*. 8vo. vol. 154. *Lond*. 1867. 8vo.
- Bombay Tides. *Tract*. 8vo. vol. 154. *Westminster*, 1866. 8vo.
- Euphrates Valley Railway. Report on the Ports of the Persian Gulf. *Tract*. 8vo. vol. 221. *Lond*. 1872. 8vo.
- Report on present state and prospects of the Madras Harbour Works. *Tract*. folio. vol. 27. *Madras*, 1879. folio.
- Report on the Tides of the Port of Kurrachee, *etc*. *Tract*. 8vo. vol. 154. *Westminster*, 1866. 8vo.
- Kurrachee Harbour. Second Report on the State of the Harbour. *Tract*. 8vo. vol. *Bombay*, 1864. 8vo.
- Kurrachee Harbour. Second report, and report of the survey of 1857-8, addressed to Mr. Walker. *Tract*. 8vo. vol. 135. *Westminster*, 1858. 8vo.
- — See also:—INDIA.—KARÁCHI.
- On Breakwater Construction, especially with reference to the Harbour Works at Kurrachee and Madras, *etc*. *Tract*. 8vo. vol. 321. *Lond*. 1880. 8vo.
- On the Estuary of the Severn. *Tract*. 8vo. vol. 498. *Lond*. 1847. 8vo.

(From Min. Proc. Inst. C.E.)

PARKES, W.—*continued*. Report on the formation of a harbour at Madras. 1873. *See* INDIA.—MADRAS.

— The Tides. [By W. Parkes.] 1857. *See* ANONYMOUS.

PARKES MUSEUM OF HYGIENE. International Exhibition, 1881, South Kensington. Official Catalogue.

Lond. [1881.] 8vo.

PARKIN, J. The Utilisation of the Sewage of Towns. *Tract.* 8vo. *col.*

Lond. 1862. 8vo.

PARKINSON, J. C. The Ocean Telegraph to India.

Lond. 1870. 8vo.

PARKINSON, R. M. Structural Mechanics: a handbook for engineers, architects, and students. *Lond.* 1890. 8vo.

— *See* LOWESTOFT. Description of the Ravine Bridge. R. M. Parkinson, Engineer. [1887.]

PARKINSON, Rev. T. A System of Mechanics and Hydrostatics.

Cambridge, 1789. 4to.

PARKINSON, W., and FRODSHAM, W. J. Observations on Chronometers, from the Appendix to Captain Sir J. Ross's Narrative of his second Expedition to the Arctic Regions, from 1829 to 1833.

Tract. 4to. *col.* 21.

Lond. 1834. 4to.

PARKS, M. T., *Lieut. R.N.* The high and low water features of the River Mersey, *etc.* 1857. *See* MERSEY, *River*.

PARLBY, S., *Col.* Endeavours to improve the construction of the War Rocket. *Tract.* 8vo. *col.* 132.

Lond. 1862. 8vo.

— Observations upon the plan of the Breakwater and Harbour of Refuge as now proposed to be constructed in Portland Roads.

Tract. 8vo. *col.* 286.

Weymouth, 1847. 8vo.

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Tract. 8vo. *col.* 113.

Lond. 1855–57. 8vo.

PARLIAMENTARY AND STATE PAPERS [ENGLAND AND WALES].—ADMIRALTY—*continued*. Copy of Letter from the Royal Institute of British Architects protesting against the adoption of the (Admiralty Buildings Extension) Scheme.

Lond. 1888. folio.

— Report from the Select Committee on Admiralty monies and accounts, *etc.* *Lond.* 1868. folio.

— Report on Admiralty Surveys. *See infra* :—SURVEYS.
See also :—ADMIRALTY.

ANCHORS. *See infra* :—CHAIN CABLES AND ANCHORS.

ANNUITIES. *See infra* :—INSURANCE.

ARCHITECTS.

— A Bill to provide for the Qualification and Registration of Architects. *Lond.* 1889. folio.

— Bill for the Registration of Architects. *Lond.* 1890. folio.

ARCTIC EXPEDITIONS.

— Papers and correspondence relative to the Arctic Expedition under Sir John Franklin. *Lond.* 1850. folio.

— Journal and Proceedings of the Arctic Expedition, 1875–76, under the command of Sir G. S. Nares. *Lond.* 1877. folio.

— Papers and correspondence relating to the equipment and fitting out of the . . . Expedition. With a chart.
Lond. 1875, 76. folio.

— Report of the Committee on the causes of the outbreak of Scurvy in the Arctic Expedition. *Lond.* 1877. folio.

— Results derived from the Arctic Expedition, 1875, 76. 1. Physical observations by Captain Sir Geo. Nares, and Captain Feilden.
2. Medical report on the Eskimo dog disease. By B. Ninnis.
Lond. 1878. folio.

ARMY.

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— [*Estimates.*] Army Estimates of effective and non-effective services for 1872 (1873, *etc.*). *Lond.* 1873, *etc.* folio.

— Memorandum of the Secretary of State relating to the Army Estimates, 1887–88, *etc.* *Lond.* 1887, *etc.* folio.

— [*Guns.*] *See infra* :—ORDNANCE.

PARLIAMENTARY AND STATE PAPERS [ENGLAND AND WALES].—ARMY—*continued*. [*Scientific Corps*.] Reports of the Commissioners appointed to consider the best mode for training officers for the Scientific Corps, together with an account of foreign and other military education. *Lond.* 1857. folio.

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DEFENCES AND FORTIFICATIONS.

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— Reports from the Select Committee on Steam Boiler Explosions. Minutes of evidence, *etc.* *Lond.* 1870, 71. folio.

— Act to make better provision for inquiries regarding Boiler Explosions. *Lond.* 1882. folio.

— Board of Trade Reports issued before the passing of the Boiler Explosions Act, 1882. *Lond.* 1879–82. folio.

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— Returns made to the Board of Trade, in pursuance of Sec. 39, Sub. Sec. 2, of the Railway and Canal Traffic Act, 1888, in respect of the Canals and Navigations in the United Kingdom for the year 1888–1889, *etc.* *Lond.* 1890, *etc.* folio.

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— Report from the Joint Committee of the House of Lords and the House of Commons on the Canal Rates, Tolls, and Charges Provisional Order Bills : with Proceedings, Minutes of Evidence, and index. *Lond.* 1893. folio.

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PARLIAMENTARY AND STATE PAPERS [ENGLAND AND WALES].—EXPLOSIVES—*continued*. Order in Council No. 12 (to replace No. 8) relating to the keeping of Explosives for Private Use and not for Sale. *Lond.* 1883. folio.

— Explosive Substances Act, 1883. *Lond.* 1883. folio.

— Bill to amend the Explosive Substances Act, 1883. *Tract.* folio. vol. 37. *Lond.* 1886. folio.

— Report on the Risks arising and Precautions to be adopted in the manufacture and handling of Nitro-Benzole and Di-Nitro-Benzole: by Dr. Dupré and Commander Hamilton P. Smith. *Lond.* 1892. folio.

— Electric Lighting of factories and magazines for Explosives, 1891. *See supra*:—ELECTRIC LIGHT.

See also infra:—PETROLEUM.

FACTORIES AND WORKSHOPS.

— Reports of the Inspectors of Factories, 1833–79. 10 vols. *Lond.* 1834–1880. folio and 8vo.

— Act to consolidate and amend the Law relating to Factories and Workshops. *Lond.* 1878. 8vo.

— Act to amend the Law relating to certain Factories and Workshops. *Lond.* 1883. 8vo.

FINANCE.

— Reports from H. C. Committees on different branches of Public Income and Expenditure. *Lond.* 1786–91. folio.

— [Finance Reports. 1798–1803.] *Lond.* 1803. folio.

FINE ARTS.

— Report of the Fine Arts Commission. *Lond.* 1842. folio.

FIRE PROTECTION.

— Report (Index to Report) from the Select Committee on Fire Protection. 2 vols. *Lond.* 1867. folio.

FISHERIES.

— [A Collection of Miscellaneous Reports on British Fisheries, 1785–1801.] *Lond.* 1803. folio.

— Convention between Her Majesty and the King of the French, . . . defining and regulating the limits of the right of Oyster and other Fisheries. *Lond.* 1839. folio.

— Translation from Dutch pamphlets on Herring Fisheries. (*Board of Trade*.) *Tract.* 8vo. vol. 114. *Lond.* 1858. 8vo.

— Report from the Select Committee on Oyster Fisheries. *Lond.* 1876. folio.

— Report of the Commissioners appointed to enquire into the Salmon Fisheries (England and Wales), together with the Minutes of Evidence. *Lond.* 1861. folio.

PARLIAMENTARY AND STATE PAPERS [ENGLAND AND WALES]—*continued.*

FOG SIGNALS.

- Correspondence with the Board of Trade respecting Fog Signals, *etc.* *Lond.* 1875. folio.
- Report by Professor Tyndall to the Trinity House, upon recent experiments with regard to Fog Signals, *etc.* *Lond.* 1874. folio.
- Return of all Fog Signals in operation under the three general lighthouse authorities of the United Kingdom : and report . . . of a visit to Canada and North America with a view of examining the subject of fog signals. *Lond.* 1873. folio.
- Return showing the number and position of the Fog Signals placed on or near the coasts of Great Britain and Ireland . . . distinguishing the kind employed, the motive power, and the time occupied in putting the signal into operation : also, cost of each apparatus. *Lond.* 1879. folio.
- *See also* :—TRINITY HOUSE.

FORTIFICATIONS. *See supra* :—DEFENCES AND FORTIFICATIONS.

FRIENDLY SOCIETIES.

- Reports of the Chief Registrar of Friendly Societies, Industrial and Provident Societies, Trade Unions, for 1878. *Lond.* 1879. folio.

GAS AND GAS COMPANIES.

- Report from the Select Committee on Gas Light Establishments. *Lond.* 1823. folio.
- Minutes of Evidence taken before a Committee of the House of Commons on the London and Westminster Oil Gas Bill. *Lond.* 1824. folio.
- Gas Supply Consolidation Acts. *Lond.* 1847. folio.
- Report of the Gas Referees upon the Sulphur Question. *Lond.* 1870. folio.
- Report by the Gas Referees on Ammonia Impurity. *Lond.* 1871. folio.
- First report by the Gas Referees on Gas Burners. *Lond.* 1871. folio.
- Correspondence . . . relative to the appointment of Gas Referees ; and . . . relative to the quantity of sulphur allowed in the gas supplied by the Gas and Coke Company : also report of sulphur purification at Beckton Gasworks by the Gas Referees. *Lond.* 1872. folio.
- Instructions for the Gas Examiners. *Lond.* 1872–73. folio.
- Return relating to all authorised Gas Undertakings in the United Kingdom belonging to Local Authorities. *Lond.* 1882, *etc.* folio.
- Return relating to all authorised Gas Undertakings other than those of local authorities. *Lond.* 1885, *etc.* folio.

PARLIAMENTARY AND STATE PAPERS [ENGLAND AND WALES].—GAS AND GAS COMPANIES—*continued*. Board of Trade Memorandum on the Re-verification of the Gas-measuring Standards. *Tract. folio. vol. 38.* Lond. 1886. folio.

— Standard Gauges for the connecting pipes and fittings used with gas-meters. (*Board of Trade.*) *Tract. folio. vol. 41.* Lond. 1887. folio.

— Memorandum stating the nature of the proposals contained in the Provisional Orders included in the Gas and Water Orders Confirmation Bill. Lond. 1888. folio.

GUN COTTON, GUNPOWDER. *See supra*:—EXPLOSIVES.

GUNS. *See infra*:—ORDNANCE.

HARBOURS, BREAKWATERS, *etc.*

— Report from Select Committee on Harbours of Refuge, with the Minutes of Evidence. Lond. 1836. folio.

— Report of the Commissioners on the Harbours of the South-Eastern coast. Lond. 1840. folio.

— Tidal Harbours Commission. Reports of the Commissioners appointed to inquire into the state and condition of the Harbours, Stores and Navigable Rivers of Great Britain and Ireland. With Appendices, *etc.* 3 vols. Lond. 1845–47. folio.

— [Another edition (Reports only).] *Tract. 8vo. vol. 75.* Lond. 1846. 8vo.

— Tidal Harbours Commission. Opinions of Harbour Boards, Lloyd's Agents, and others, on the Harbour Conservancy Bill. Lond. 1847. folio.

— Harbours of Refuge and Breakwaters in the Channel. Quarterly returns of the Engineers, accounts, *etc.* 2 vols. Lond. 1850–1874. folio.

— Report from the Select Committee on Harbours of Refuge, together with the proceedings of the Committee, minutes of evidence, Appendix and Index. 1857, 58. folio.

— Royal Commission on Harbours of Refuge. Evidence given before the Commissioners at Wick, Fraserburgh, Peterhead, and Aberdeen. *Tract. folio. vol. 39.* Banff, 1858. folio.

— Report of the Commissioners appointed to complete the inquiry in the terms recommended in the report of the Select Committee of the House of Commons, in 1858; with minutes of evidence. 2 vols. Lond. 1859. folio.

— Memorandum on Harbours of Refuge, Trading Harbours, Passing Tolls, *etc.*, by T. H. Farrar to the Board of Trade. Lond. 1860. folio.

— Report from the Select Committee of the House of Lords on Breakwaters: with the proceedings of the Committee, minutes of evidence, appendix and index. Lond. 1860. folio.

— Memorandum prepared by the Board of Trade on Harbours of Refuge. 1858–59. *Tract. folio. vol. 27.* Lond. 1862. folio.

PARLIAMENTARY AND STATE PAPERS [ENGLAND AND WALES].—HARBOURS, BREAKWATERS, *etc.*—*continued.* Correspondence between the Board of Trade and any other departments of the Government on the subject of Harbours of Refuge since the report of the Select Committee of 1857. *Lond.* 1864. folio.

— Reports by the Board of Trade of their proceedings under the General Pier and Harbour Acts, *etc.* *Lond.* 1864, *etc.* folio.

— Report on Passive Obstructions for the defence of Harbours and Channels by the Committee on Floating Obstructions and Submarine Explosive Machines. *Lond.* 1866. folio.

— Return of the Harbour Authorities, giving description of Works executed within the last 20 years . . . Cost of such works, *etc.* *Lond.* 1883. folio.

— Report from the Select Committee on Harbour Accommodation, with Minutes of Evidence and Appendix. *Lond.* 1883, 84. folio.

— Copy of Memorandum stating the nature of the proposals contained in the Provisional Orders included in the Pier and Harbour Orders Confirmation Bills, Nos. 1 and 2. *Lond.* 1888. folio.

HIGHWAYS. *See infra* :—ROADS AND HIGHWAYS.

HOSPITALS.

— Copy of further Correspondence relating to Hospitals for British Seamen in Foreign Ports. *Lond.* 1879. folio.
See also supra :—BARRACKS AND HOSPITALS.

HOUSES AND DWELLINGS.

— Report of the Commissioners on the Warming and Ventilation of Dwellings. *Lond.* 1857. folio.

— Joint Report by Dr. Barry and Mr. P. Gordon Smith on Back-to-back Houses, February 1888. *Lond.* 1888. folio.

HYDROGRAPHER'S REPORT. *See infra* :—SURVEYS.

INFLAMMABLE LIQUIDS.

— A Bill to amend and consolidate the law relating to the keeping, selling and conveyance of Inflammable Liquids. *Lond.* 1891. folio.

INSTRUCTION, *Scientific, Technical, etc.* *See supra* :—EDUCATION.

INSURANCE of Boilers. *See supra* :—BOILERS.

INSURANCE AND ANNUITIES.

— Regulations respecting Government Life Insurance and Annuities, with an Appendix of forms. *Tract. folio. vol. 12* *Lond.* 1865. folio.

— Tables of the Premiums to be charged under contracts for the Insurance of Lives, or the grant of Government Annuities. *Tract. 8vo. vol. 180.* *Lond.* 1865. 8vo.

PARLIAMENTARY AND STATE PAPERS [ENGLAND AND WALES]—*continued.*

IRON.

- Transactions and report of the Special Committee on the application of Iron for defensive purposes. 3 vols. [With 8 vols. of photographs.] *Lond.* 1861–64. folio.
- Experiments at the Royal Arsenal, on Cast Iron for the Manufacture of Cannon. *Lond.* 1858. folio.
- On Iron and its uses in the Naval Service: being the second report of the Committee [of the Admiralty] on Metals. *Lond.* 1867. folio.

JUSTICES OF THE PEACE.

- Return giving the names and professions or descriptions of all Justices of the Peace for the counties of England and Wales on the first day of June, 1887. *Lond.* 1888. folio.

LABOUR.

- Return showing the Average Number of Hours worked as a Week's Work in the Chief Trade Centres in the years 1850, 1860, 1870, 1880 and 1890. *Lond.* 1890. folio.

LAND.

- Reports on the Inclosure and Improvement of Waste Lands. *Lond.* 1795–1800. folio.
- An Act for consolidating in one Act certain provisions usually inserted in Acts authorising the taking of Lands for Undertakings of a public nature. *Lond.* 1846. folio.
- Report on proposed general regulations for the improvement of Land. Appendix. *Lond.* 1855. folio.
- Report from the Select Committee on the Improvement of Land: with proceedings, minutes of evidence, *etc.* *Lond.* 1873. folio.
- Reports on the Inclosure and Improvement of Waste Lands. (1795, 97, 1800.) *Lond.* 1803. folio.

LIFE INSURANCE. *See supra* :—INSURANCE.

LIFEBOATS.

- Abstract of published report on Lifeboats, by Captain Washington and Committee, awarding prize on models sent to Admiralty to compete for the premium of 100 guineas offered by the Duke of Northumberland. [With plates.] *Tract. folio. vol. 10.*
[*Lond.* 1851.] folio.
- *See also infra* :—NAVY.—[Lifeboats.]

LIGHTHOUSES, *etc.*

[Lists issued by the Hydrographic Office, Admiralty.]

- The Admiralty List of Lights in the British Islands, *etc.* *Tract. 8vo. vol. 374.*
Lond. 1876. 8vo.

PARLIAMENTARY AND STATE PAPERS [ENGLAND AND WALES].—LIGHTHOUSES, *etc.*—*continued.* Lighthouses on the Coasts and Lakes of British North America, corrected to September 1853. *Tract. 8vo. vol. 113. Lond. 1853. 8vo.*

— Lighthouses on the Coasts of Great Britain and Ireland, corrected to July 1841, (1844.) *Tract. 8vo. vol. 72. Lond. 1841, 44. 8vo.*

— Lighthouses on the Eastern and Western Coasts of South America, and the Western Coast of North America, corrected to November 1853. *Tract. 8vo. vol. 113. Lond. 1853. 8vo.*

— Lighthouses on the Mediterranean, Black Sea, and Sea of Azof, corrected to November 1853. *Tract. 8vo. vol. 113. Lond. 1853. 8vo.*

— Lighthouses on the North and West Coast of France, Spain, and Portugal, corrected to February 1854. *Tract. 8vo. vol. 113. Lond. 1854. 8vo.*

— Lighthouses of the British Islands, corrected to September 1851, (May 1853, March 1854, July 1856.) *Tract. 8vo. vol. 113. Lond. 1851–56. 8vo.*

— Lighthouses of the West-India Islands, and adjacent coasts, corrected to August 1853. *Tract. 8vo. vol. 113. Lond. 1853. 8vo.*

— Lighthouses, beacons, and floating lights of the United States, corrected to August 1853. *Tract. 8vo. vol. 113. Lond. 1853. 8vo.*

— The Belgian, Dutch, Hanoverian, Danish, Prussian, Russian, Swedish, and Norwegian Lighthouses, corrected to April 1854. *Tract. 8vo. vol. 113. Lond. 1854. 8vo.*

— Lighthouse Revenues and Expenditure, 1839. *Lond. 1841. folio.*

— Report and minutes of evidence of the Committee on Lighthouses. *Lond. 1834. folio.*

— Reports from the Select Committee on Lighthouses: with minutes of evidence, *etc.* 2 vols. *Lond. 1843, 45. folio.*

— Return respecting Lighthouses in the British colonies and possessions. *Lond. 1850. folio.*

— Applications made to the Commissioners respecting Northern Lighthouses. *Lond. 1851. folio.*

— Report of the Commissioners on Lights, Buoys, and Beacons. 2 vols. in 1. *Lond. 1861. folio.*

— An Account showing the Dues received and Expenditure incurred in the construction, repair, and maintenance of Lighthouses Abroad during the year 1884–85, (1885–86, *etc.*) *Lond. 1886, etc. folio.*

— Correspondence (Further Correspondence) on recent suggestions respecting the characteristics of Lights in Lighthouses. 2 pts. *Lond. 1880. folio.*

PARLIAMENTARY AND STATE PAPERS [ENGLAND AND WALES].—LIGHTHOUSES, *etc.*—*continued.* Correspondence between Sir W. Thomson, Lloyd's Committee, and the Board of Trade respecting Lighthouse Characteristics. *Lond.* 1880. folio.

— Correspondence relative to the comparative advantages of the Lighthouse Lanterns adopted by the Corporation of the Trinity House and the Commissioners of Northern Lighthouses. *Tract. folio. vol. 11.* *Lond.* 1868. folio.

— Papers relative to a proposal to substitute gas for oil, as an illuminating power for Lighthouses. 3 pts. *Lond.* 1869–75. folio.

— Correspondence relative to Lanterns for Lighthouses. *Lond.* 1870. folio.

— Correspondence . . . relative to proposals to substitute Mineral Oils for Colza Oil in Lighthouses. *Lond.* 1871–74. folio.

— Return of Lighthouses and Light Vessels where Mineral Oil has been or is about to be substituted for Colza Oil, *etc.* *Lond.* 1875. folio.

— Correspondence on a proposed Investigation of the respective merits of Oil, Gas, and Electricity as Lighthouse Illuminants, including Correspondence between the Board of Trade and Prof. Tyndall. *Lond.* 1883. folio.

— Further Correspondence on the subject of the Composition of the Lighthouse Illuminants Committee. *Lond.* 1883, 84. folio.

— Report to the Trinity House at Deptford Strond on the relative merits of Electricity, Gas, and Oil, as Lighthouse Illuminants. *Lond.* 1885. folio.

— Further Correspondence on the subject of Lighthouse Illuminants. 2 pts. *Lond.* 1887. folio.

— Reports by the Trinity House of Deptford Strond, the Commissioners of Northern Lighthouses, and the Commissioners of Irish Lights of their inspection of local lighthouses, buoys and beacons. *Lond.* 1885–87. folio.

— Instructions to surveyors, concerning Lights and Fog-signals. *Tract. 8vo. vol. 426.* *Lond.* 1886. 8vo.

— Correspondence on the subject of Lighthouse Illuminants. *Lond.* 1888. folio.

— Correspondence on the subject of Lighthouse Illuminants (in continuation of the paper of 1888); also, memorials from ship-owners . . . asking for further inquiry into the Report of the Trinity House on the South Foreland Experiments. *Lond.* 1889. folio.

— Return giving the Correspondence between Shipowners, Chambers of Commerce, Mr. John R. Wigham, the Commissioners of Irish Lights, the Trinity House, and the Board of Trade, which has taken place since the issue of the last Return on the subject of Lighthouse Illuminants. *Lond.* 1893. folio.

PARLIAMENTARY AND STATE PAPERS [ENGLAND AND WALES].—LIGHTHOUSES, *etc.*—*continued.* 1st and 2nd Reports of the Electrical Communication Committee on the desirability of Electrical Communication between Light-vessels (and Outlying Lighthouses) and the Shore, with the special object of facilitating the saving of life at Sea, together with Minutes of Evidence and Appendices. *Lond.* 1887–89. folio.

- 1st Report of the Royal Commission appointed to inquire what Lighthouses and Light-vessels it is desirable to connect with the Telegraphic System of the United Kingdom, *etc.* *Lond.* 1893. folio.

LIGHTNING.

- Papers relating to Harris's Lightning Conductors. *Lond.* 1840. folio.
- Report and evidence from the Commission appointed to inquire into the plan of W. S. Harris relating to the protection of ships from the effects of Lightning. *Lond.* 1840. folio.

LINEN.

- Report on the state of the manufacture of Linen threads and tapes (1744). *Lond.* 1803. folio.
- Report on the state of Linen Manufactories (1751). *Lond.* 1803. folio.
- Report on the state of the Linen Trade (1773). *Lond.* 1803. folio.

LOCAL GOVERNMENT.

- Report (Supplements) on Local Government, Provisional Orders (No. 3) Bill. *Lond.* 1884. folio.
- Special Report on Local Government Provisional Orders (No. 3) Bill from the Select Committee, together with the Proceedings of the Committee, Minutes of Evidence and Appendix. *Lond.* 1884. folio.

LOCAL GOVERNMENT BOARD.

- Reports, 1871 (1872, *etc.*). *Lond.* 1872, *etc.* 8vo.
- Twenty-first Annual Report, 1891–92. Supplement in continuation of the report of the Medical Officer for 1891. Enteric Fever in the Tees Valley. *Lond.* 1893. folio.

See also infra :—PUBLIC HEALTH.

LOCAL IMPROVEMENTS.

- Index [to Reports on] Local Improvements and Taxation, 1809–1834. [*Lond.* 1835.] folio.

LOCOMOTIVE ENGINES.

- Report from the Select Committee of the House of Lords on Road-Locomotives Bill. *Lond.* 1871. folio.
- Report from the Select Committee on Locomotives on Roads, *etc.* *Lond.* 1873. folio.

PARLIAMENTARY AND STATE PAPERS [ENGLAND AND WALES]—*continued.*

MACHINERY.

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MAILS.

- Report on Railways and Ports of Italy in reference to the use of the Italian route for the conveyance of the Eastern Mails, 1866. *See ITALY.*—[*Railways.*]
- Bill to make further provision for the Conveyance of Her Majesty's Mails. *Lond.* 1893. folio.

METALS.

- First (second) Report of the Committee on Metals. [MS.] 1845, 46. folio.

METEOROLOGY.

- Station instructions for Meteorological Telegraphy. *Tract.* 8vo. vol. 135. *Lond.* 1862. 8vo.
- Returns showing the list of places to which Telegraphic Weather Intelligence was sent in 1868 (1869–77). *Lond.* 1868–77. folio.
- Correspondence relating to the establishment of a Council to administer the parliamentary vote for conducting meteorological observations and experiments on behalf of the Government. *Lond.* 1877. folio.
- Report of the Treasury Committee appointed to inquire into the conditions and mode of administration of the annual grant in aid of Meteorological Observations. *Lond.* 1877. folio.
- Return of Storms which have visited the British Islands between Jan. 1st, 1874, and Dec. 31st, 1883. *Lond.* 1884. folio.

MINES.

- Reports of the Inspectors of Mines, 1851 (1852, *etc.*). *Lond.* 1852, *etc.* folio.
- Return of the Plans and Sections of the Metalliferous Mines of the United Kingdom, *etc.* *Lond.* 1865. folio.
- List of Mines worked in the year 1888 (1889, *etc.*). *Lond.* 1889, *etc.* folio.
- List of the Plans of Abandoned Mines deposited in the Home Office under the Coal and Metalliferous Mines Regulation Acts, 1889. *Lond.* 1889, *etc.* folio.

PARLIAMENTARY AND STATE PAPERS [ENGLAND AND WALES].—MINES—*continued*. A Bill to provide for the Constitution of Mining Boards. *Lond.* 1892. folio.

— A Bill to provide for the Establishment of Mining Boards.

[*Lond.* 1893.] folio.

— Return showing the Number of Mines at work under the Coal and Metalliferous Mines Regulation Acts in each Inspection District in the United Kingdom during the year 1891; the Number of Persons employed in and about the Mines; the Tonnage of Minerals raised therefrom, *etc.* [*Lond.* 1892.] folio.

— [*Accidents and Explosions.*] Report from the Select Committee on Accidents in Mines. *Lond.* 1835. folio.

— Preliminary (and final) Report of H.M. Commissioners appointed to inquire into Accidents in Mines. 2 pts.

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— Summaries of the Fatal Accidents which occurred in Mines during the year 1893. *Lond.* 1894. folio.

— [*Hours of Labour, Wages of Employees, etc.*] Reports of the Commissioner appointed . . . to inquire into . . . the condition of the population in Mining Districts.

Lond. 1844, 49, 53. folio and 8vo.

— Report of the Commission appointed to inquire into the condition of all Mines (Health and safety of persons employed) to which the provisions of Act 23 and 24 Vict. cap. 151, do not apply, *etc.* 4 vols. in 2. *Lond.* 1864. folio.

— Return showing the number of Women, Girls, Men, and Boys, employed in and about Mines, *etc.* *Lond.* 1887. folio.

— A Bill to restrict Labour in Mines to Eight Hours per Day.

Lond. 1889. folio.

— A Bill to restrict labour in Mines to Eight Hours per day.

Lond. 1890. folio.

— Return showing the average number of Hours and Days, daily and weekly worked . . . in and about Mines in the United Kingdom. *Lond.* 1890. folio.

— Return of Rates of Wages in the Mines and Quarries in the United Kingdom, and report thereon. *Lond.* 1891. folio.

— [*Output of Minerals.*] Tabular return showing the Annual Output of the principal Minerals in the United Kingdom . . . with the Isle of Man, from 1860 to 1890. *Lond.* 1891. folio.

— [*Rates, Rents, Royalties.*] Return showing the gross estimated Rental and Rateable Value of the several Coal, Ironstone and other Mines, in each Poor Law Union in England and Wales, *etc.*

Lond. 1890. folio.

— A Bill to provide for fixing a fair Rent in respect of Wayleaves and other Mining Easements. [*Lond.* 1893.] folio.

PARLIAMENTARY AND STATE PAPERS [ENGLAND AND WALES].—MINES.—[*Rates, Rents, Royalties*]*—continued.* Reports by Her Majesty's Representatives abroad . . . on Mining Rents and Royalties. *Lond.* 1887. 8vo.

— Reports of the Royal Commission appointed to inquire into the subject of Mining Royalties : with Minutes of Evidence, *etc.* 3 pts. in 1 vol. *Lond.* 1890–93. folio.

— [Statistics.] Mineral Statistics of the United Kingdom, with the Isle of Man, for 1882 (1883, *etc.*); prepared by H.M. Inspectors of Mines. *Lond.* 1884, *etc.* folio.

— Summaries of the Statistical Information contained in the Reports of H.M. Inspectors of Mines. Also List of Inspectors and Inspection Districts : forms of returns ; and particulars of examination boards, and of examinations. *Lond.* 1889, *etc.* folio.

— [Underground Workings.] Return of the length of Underground Workings and passages in some of the principal collieries and metalliferous mines in England and Wales. *Lond.* 1881. folio.

— [Ventilation.] Report on the Ventilation of Mines and Collieries : by J. Phillips. *Lond.* 1850. folio.

— Report on Ventilation of Mines : by J. R. Blackwell. *Lond.* 1850. folio.

See also supra :—EXPLOSIVES.

MINT.

— Report from the Select Committee on the Royal Mint ; with minutes of evidence, *etc.* *Lond.* 1837. folio.

— Report of the Commissioners, with minutes of evidence, *etc.* *Lond.* 1849. folio.

— Report on Changes made in the Management of the Royal Mint. *Lond.* 1852. folio.

— Annual Report of the Deputy Master of the Mint, 1870 (1871, *etc.*). *Lond.* 1871, *etc.* 8vo.

MONUMENTS.

— Report from Select Committee on national Monuments and works of Art. *Lond.* 1841. folio.

NAVIGATION.

See infra :—SHIPS and SHIPPING : and TRADE.

NAVY.

— Regulations and Instructions relating to Her Majesty's Service at Sea. *Lond.* 1806. 4to.

— Report from the Select Committee on the Steam Navy. With Minutes of Evidence and Appendix. *Lond.* 1849. folio.

— Naval Affairs. Debates and Proceedings in both Houses. of Parliament, 1889. *Lond.* 1889. 8vo.

PARLIAMENTARY AND STATE PAPERS [ENGLAND AND WALES].—NAVY—*continued*.

- [Coal.] *See supra* :—COAL.
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- Minutes of Evidence taken before the Committee on Cutlasses and Cutlass Sword Bayonets supplied to the Royal Navy. Lond. 1887. folio.
- Observations of certain Officers on the Report of the Committee on Cutlasses and Cutlass Sword-Bayonets supplied to the Royal Navy, 17th March, 1887, *etc.* Lond. 1887. folio.
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- [Engines and Boilers.] Report of the Committee appointed to consider the best means of securing the highest mechanical skill in the management of the engines of H.M. ships of war. Lond. 1877. folio.
- Correspondence from 1873, between the Admiralty and Messrs. Perkins, in reference to their system of Engines and Boilers. Lond. 1878. folio.
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See also supra :—BOILERS.
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- Navy Estimates for the year 1869 (1870, *etc.*). Lond. 1869, *etc.* folio.
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- Report of the Admiralty Committee on Turret Ships, [and] Report of a Committee of Naval Officers, on the design of a Sea-going Turret Ship submitted by Capt. C. P. Coles. Lond. 1866. folio.
- Return of all Armour-clad Ships and Batteries built by contract for Her Majesty's Service, Nov. 1855. Lond. 1867. folio.
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- Report of the Committee on Designs for Ships of War, on the ships of the "Cyclops" and "Devastation" classes, *etc.* Lond. 1871. folio.
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— [Volunteers.] *See infra* :—VOLUNTEERS.

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- — 3rd edition. (Treatise on the Manufacture of Guns and text-book of Service Ordnance.) *Lond.* 1886. 8vo.
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- Return showing the Amount of Money expended on all Railways in Great Britain and Ireland, 1841, 44, and 47. *Lond.* 1847. folio.
- Returns showing . . . Capital, Traffic, Working Expenditure, Rolling Stock, *etc.*, of each Railway Company in England and Wales, Scotland and Ireland, 1859, *etc.* *Lond.* 1860, *etc.* folio.
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- Return showing for each Railway Company the amount of Capital and loans. *Lond.* 1849. folio.
- General Report to the Board of Trade in regard to the share and loan Capital, the traffic in passengers and goods and the working and expenditure and net profits from railway working of the railway companies of the United Kingdom, 1869, *etc.* *Lond.* 1870, *etc.* folio.
- Return showing the Holding of Debenture, Preference, and Ordinary Stock of Railways of the United Kingdom, and Shareholders. *Lond.* 1886. folio.
- [*Footboards*.] Returns relating to Continuous Footboards on the Carriages of Railways. *Lond.* 1878. folio.
- [*Gauge*.] Report of Gauge Commissioners : together with Minutes of Evidence, *etc.* *Lond.* 1846. folio.
- Observations on the report of the Gauge Commissioners, as presented to Parliament. *Tract. folio. vol. 5.* *Lond.* [1846.] folio.
- Supplemental observations on the published evidence and Appendix of the Gauge Commissioners. *Tract. folio. vol. 5.* *Lond.* 1846. folio.
- Copy of Major-General Pasley's Report on Captain Powell's patent sectional transferable Railway Carriages for carrying goods, either on the broad or narrow gauge. *Lond.* 1846. folio.

PARLIAMENTARY AND STATE PAPERS [ENGLAND AND WALES].—RAILWAYS—*continued*. [*Ladies' Compartments*.] Circular addressed by the Board of Trade to the Railway Companies of the United Kingdom, calling attention to the Advisability of Providing separate Compartments for Female Passengers.

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— Replies to Circular addressed by the Board of Trade to the Railway Companies of the United Kingdom, calling attention to the Advisability of providing separate Compartments for Female Passengers.

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— Return relative to Railway Bills, 1845. *Lond.* 1845. folio.

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— Return of all Railway Bills, during the Session 1846.

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— Railway Bills. Return May and June 1846.

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— Reports from the Select Committee on Railway Acts Enactments with the minutes of evidence, appendix, and index, *etc.*

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— Account relative to Railway Bills passed in the last session of Parliament.

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— Return of the names of all Bills or projects on which committees have made reports. *Lond.* 1845. folio.

— Railway Deposits. An account of all Monies paid to the Courts of Chancery in England and Ireland, and the Court of Exchequer in Scotland, on account of Railway Bills now before the House of Commons, *etc.* *Lond.* 1846. folio.

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- Report from the Board of Trade on the Railway, Canal, Tramway, Gas and Water Bills. *Lond.* 1854, *etc.* folio.
- A Collection of the Public General Acts for the Regulation of Railways, *etc.* *Westminster*, 1855. 12mo.
- A Bill for the better Regulation of Railway and Canal Traffic and for other purposes. *Lond.* 1886. folio.
- A Bill intituled an Act for the better Regulation of Railway and Canal Traffic, and for other purposes. *Lond.* 1887. folio.
- A Bill (as amended in Committee) intituled an Act for the better regulation of Railway and Canal Traffic, and for other purposes. *Lond.* 1887. folio.
- A Bill (as amended on report) intituled an Act for the better regulation of Railway and Canal Traffic, and for other purposes. *Lond.* 1887. folio.
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- A Bill (as amended in Committee) intituled an Act for the better regulation of Railway and Canal Traffic, and for other purposes. *Lond.* 1888. folio.
- Railway and Canal Traffic Bill [H. L.], Commons Amendments. *Lond.* 1888. folio.
- Act for the better Regulation of Railway and Canal Traffic, and for other purposes. *Lond.* 1888. 8vo.
- Report from the Standing Committee on Trade (including Agriculture and Fishing), Shipping and Manufactures, on the Railway and Canal Traffic [H. L.] Bill: with the Proceedings of the Committee. *Lond.* 1888. folio.
- Bill to amend the Regulation of Railways Acts, *etc.* *Lond.* 1889. folio.
- Bill to vary and extend the provisions of the Railway and Canal Traffic Acts, 1854, 1873, and 1888. *Lond.* 1891. folio.
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- PARLIAMENTARY AND STATE PAPERS [ENGLAND AND WALES].—RAILWAYS.—[*Legislation*].—*continued*. Bill to amend “The Regulation of Railways Act, 1889,” and to further provide for the safe working of Railways. *Lond.* 1893. folio.
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See also infra :—[*Rates, etc.*]
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See also infra :—[*Rates and Charges.*]
- [*Rates and Charges, and Classification of Traffic.*] Report from the Select Committee on Rates and Fares: with proceedings and minutes of evidence, etc. *Lond.* 1882. folio.
- Railway Rates . . . Copy of the Judgments of the Railway Commission with respect to Terminals; and also of the Judgment of the House of Lords in the case of the Lancashire and Yorkshire Railway Company *v.* Gidlow. *Lond.* 1885. folio.
- Return by the Railway Companies showing Rates charged for the carriage [of various goods] on their railway, etc. *Lond.* 1887. folio.
- A Bill for the revision of the Charges of Railway and Canal Companies, and for other purposes relating thereto. *Lond.* 1888. folio.

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— A Bill to secure one uniform Scale of Rates and Charges for the carriage of common kinds of Fish by the Railway Companies of the United Kingdom. *Lond.* 1888. folio.

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— Copy of List of Railway Companies who have deposited at the Board of Trade a revised Classification of Merchandise Traffic and Schedule of Maximum Rates and Charges under the Railway and Canal Traffic Act, 1888. *Lond.* 1889. folio.

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— Hearing of Objections to revised Classifications of Merchandise Traffic and Schedules of Maximum Rates and Charges proposed by the various Railway Companies. Minutes of Proceedings. (Railway and Canal Traffic Act, 1888.) *Lond.* 1889. folio.

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— Return giving the Names of the Railway Companies . . . comprised in the Railway Rates and Charges Orders Confirmation Bills, Nos. 1 to 26, *etc.* Lond. 1892. folio.

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— Rule made by the Board of Trade extending the period within which objections may be lodged against the Revised Classifications of Merchandise Traffic and schedules of maximum rates, tolls, dues, and charges, which have been submitted to the Board of Trade by Canal Companies in compliance with "The Railway and Canal Traffic Act, 1888." Lond. 1892. folio.

— Bill to amend the Railway Rates and Charges Order Confirmation Acts, 1891 and 1892. Lond. 1893. folio.

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- PARLIAMENTARY AND STATE PAPERS [ENGLAND AND WALES].—RAILWAYS.—[*Rates and Charges, and Classification of Traffic*].—*continued*. Correspondence between the Board of Trade and . . . various Railway Companies with regard to the Revised Rates charged for the conveyance of Merchandise Traffic, January 2nd to May 10th, 1893. *Lond.* 1893. folio.
- First(Second) Report from the Select Committee on Railway Rates and Charges, with the Proceedings, *etc.* *Lond.* 1893. folio.
- Bill to amend the Railway and Canal Traffic Act, 1888. [Analysis of rates. Terminal charges. Rebates to owners of private sidings.] *Lond.* 1894. folio.
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- Bill to make better provision for Equality of Treatment in the [rates of] carriage of British and Foreign Agricultural Products and Live and Dead Stock within the United Kingdom. *Lond.* 1894. folio.
- *See also*:—AUSTRIA.—[*Railways*.] Correspondence respecting Lone Tariff rates, *etc.* 1891. And UNITED STATES OF AMERICA.—[RAILWAYS.]
- *See* BELGIUM.—[*Railways*.] Correspondence respecting Tariffs for goods and passengers, *etc.* 1891.
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- Report on Steam Vessel Accidents. *Lond. 1839. folio.*
- Board of Trade Instructions as to the survey of the hull equipments and machinery of Steamships carrying passengers. *Tract. 8vo. vol. 399.* *Lond. 1883. 8vo.*
- [Tonnage.] Observations respecting the admeasurement of Tonnage. *Lond. 1867. 8vo.*
- Copy of papers showing the principle on which Exemptions from Tonnage are granted by the Board of Trade to some Steamers, of spaces under the uppermost deck, and refused in other steamers similarly constructed. *Lond. 1873. folio.*
- Report from the Select Committee on Merchant Ships (Measurement of Tonnage) Bill : with proceedings of the Committee, *etc.* *Lond. 1874. folio.*
- Report of H.M. Commissioners appointed to inquire into the present operation of the Law for the measurement of Tonnage. *Lond. 1881. folio.*
- [Unseaworthy Ships.] Reports of the Royal Commissioners appointed to inquire into the Unseaworthiness of British Registered Ships : with minutes of evidence, *etc.* 2 vols. *Lond. 1873, 74. folio.*
- Return of cases in which the Board of Trade have detained ships as unseaworthy, *etc.* *Lond. 1873. folio.*

PARLIAMENTARY AND STATE PAPERS [ENGLAND AND WALES].—SHIPS AND SHIPPING—*continued*.

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See supra :—RAILWAYS.—[Accidents.] Reports on foreign laws relating to Railway and Shipping Disasters.

See also :—NAVY : and WRECKS.

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STANDARDS. *See infra* :—WEIGHTS AND MEASURES.

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2 L 2

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- Special report from the Select Committee on the Electric Telegraphs Bill. With minutes of proceedings, Appendix, and index. *Lond.* 1868. folio.
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— Calculations of Densities and Expansions. [*Standards Office Publication, No. 6.*] *Lond.* 1883. 4to.

— Descriptive list of Standards of Weight and Measure deposited with the Board of Trade, and of the instrumental equipment of the Standards Office. *Lond.* 1892. folio.

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PARMENTIER, A. A. Mémoire sur les avantages que la province de Languedoc peut retirer de ses grains, *etc.* *Paris*, 1786. 4to.

PARNELL, A. The Action of Lightning and the means of defending life and property from its effects. *Lond.* 1882. 8vo.

— The Defences of the Kingdom. *Tract. 8vo. vol. 354.* *Lond.* 1882. 8vo.

PARNELL, Sir H. B., Baron Congleton. On the Construction of Coaches. *Tract. 4to. vol. 16.* *Lond.* 1835. 4to.

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- Patent Locomotive and Stationary Air Engines. *Tract.* 8vo. vol. 181. *Lond.* [1845?] 8vo.
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- An Historical and Descriptive account of the Steam Engine; with an appendix of patents and parliamentary papers. *Oxford*, 1822. 8vo.
- A Manual of Natural and Experimental Philosophy, *etc.* *Lond.* [1828?] 8vo.
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- Instructions pour la préparation des projets, *etc.* *Paris*, 1884. folio.
- Projet des travaux à faire à l'embouchure de la Seine. *Paris*, 1886. 4to.
- PARVILLE, H. DE. Les usines du Creusot à l'Exposition universelle de 1878. *Tract.* 8vo. vol. 343. *Paris*, 1879. 8vo.
- L'Exposition universelle. Lettre-préface par A. Alphand. *Paris*, 1890. 8vo.
- PASCAL, M. Traité pratique des ponts métalliques. Calcul des poutres et des ponts, par la méthode ordinaire et par la statique graphique. *Paris*, 1887. 8vo.
- PASETTI, —. VON. Darstellung des Theiss-Regulirungs-Unternehmens seit dem Beginne der Arbeiten im Jahre 1846 bis zum Schlusse Jahres 1860. *Wien*, 1862. 4to.
- Karte des Donaustromes innerhalb der Grenzen des Oesterreichischen Kaiserstaates. [.] folio.
- Report on the Harbour of Trieste. *Tract.* 4to. vol. 60.
(MS. Translated from the German.) *Vienna*, 1863. 4to.
- PASINI, P., and GIOPPI, U. Su alcune misure di portata e di rigurgito alle tombe del canale Cavour. *Tract.* 8vo. vol. 521. *Roma*, 1893. 8vo.
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- Statistique graphique des passes de la Gironde et de la Garonne maritime. [5th Int. Congr. Int. Nav.] [Paris, 1892.] 8vo.
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- Caderneta de campo, para uso dos engenheiros incumbidos de trabalhos de estradas de ferro. *Lond. 1873. 12mo.*

- PASSOS, F. P.—*continued*. As estradas de ferro do Brazil em 1879. *Tract. 4to. vol. 96.* Rio de Janeiro, 1880. 4to.
- Estrada de ferro D. Pedro II. Relatorio do anno de 1876, (1877, 78.) Rio de Janeiro, 1877–79. 4to.
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- PASTEUR, J. D. Handboek voor de officieren van het korps ingenieurs, mineurs en sapeurs. Tweede vermeerderde . . . druk. 3 vols. Arnhem, 1837–38. 8vo.
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- PASTEUR INSTITUTE. Pasteur Institute. Mansion House Fund. *Tract. 8vo. vol. 486.* Lond. 1889. 8vo.
- PATENT LAW REFORM SOCIETY. Draft of a Patent Law Reform Bill. *Tract. folio. vol. 29.* Lond. 1881. folio.
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- PATERSON, D., *Lieut.-Col.* Paterson's Roads: being an . . . accurate description of all the direct and principal cross roads in England and Wales, with part of the Roads of Scotland. 18th edition . . . augmented and improved by E. Mogg. Lond. [1829.] 8vo.
- PATERSON, JAMES. Circular for distribution amongst the Honourable Commissioners of the Metropolis roads. *Tract. 8vo. vol. 4.* Montrose, 1826. 8vo.
- A Circular Letter to Members of Parliament on M'Adam and Roads. *Tract. 4to. vol. 4.* Montrose, 1825. 4to.
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- The Testing of Pipes and Pipe-Joints in the open Trenches : with a description of the Ossett Water Works. *Tract.* 8vo. vol. 413.
Lond. 1879. 8vo.
- The Pollution of the Aire and Calder : how to deal with it, *etc.* *Tract.* 8vo. vol. 516. *Lond.* 1893. 8vo.
(Reprinted from "Engineering.")
- PATERSON, M. M., and WHEATER, W. Castleford and Whitwood Main Drainage, 1875. *Tract.* 8vo. vol. 259.
Dewsbury, 1875. 8vo.
- PATERSON, P. An account of the cast-iron Lighthouse Tower on Gibb's Hill, in the Bermudas. *Tract.* 8vo. vol. 502.
(From Min. Proc. Inst. C.E.) *Lond.* 1850. 8vo.
- PATERSON, T. Report on the condition of the Tunnel on the Line of the Lyttelton and Christchurch Railway. *Tract.* folio. vol. 15
Christchurch, N.Z., 1889. folio.
- PATERSON, W. A Memorial addressed to William the Third, on Darien and the rise and decline of Commerce. . . . Edited from a MS. in the British Museum by S. Bannister. *Tract.* 8vo. vol. 440.
Lond. 1852. 8vo.
- PATRIOTIC ASSURANCE COMPANY. Act to define and extend the objects of the Patriotic Assurance Company of Ireland, *etc.* *Lond.* 1890. folio.
- PATTEN, J. Port charges, *etc.* 1880. See HUNTER, T., and PATTEN, J.
- PATTERSON, R. C. Light Railways, and the agency to be employed in their construction. *Tract.* 8vo. vol. 207.
Adelaide, 1870. 8vo.
- PATTERSON, R. H. Copy of correspondence relating to Gas Purification, Patterson's Patent. *Lond.* 1876. folio.
- PATTINSON, J. P. British Railways: their passenger services, rolling stock, locomotives, gradients and express speeds, *etc.* *Lond.* 1893. 8vo.
- PATTISON, G. S. Statement of the facts of his connexion with the University of London. *Tract.* 8vo. vol. 67. *Lond.* 1831. 8vo.

